

The Jaffa Cultural Heritage Project Series, Volume 3

Aaron A. Burke and Martin Peilstöcker, Series Editors



Ancient Jaffa from the Persian to the Byzantine Period

Kaplan Excavations (1955–1981)



Orit Tsuf

With Contributions by Yonatan Adler, David Amit, Etan Ayalon,
Avner Ecker, Adi Erlich, Peter Gendelman, Ruth E. Jackson-Tal,
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Editors' Preface

It is with great pleasure that we present the latest volume in the Jaffa Cultural Heritage Project series. We are grateful that Dr. Tsuf has accepted our invitation to include her publication within the series and thus to make available and more visible Jaffa's contribution to the archaeology of Israel from prehistory to the Ottoman period, particularly the archaeological work of Jacob Kaplan. The work appears after the first volume in the series, *The History and Archaeology of Jaffa 1* (Peilstöcker and Burke 2011), which laid the groundwork for contextualizing renewed archaeological research in Jaffa. That volume also provided an early glimpse into the potential for integrating Jaffa's archaeology for addressing questions concerning the identity of Jaffa's inhabitants during periods that are included within the scope of the present volume. There Tsuf describes the ceramic evidence for identifying a Jewish community in Jaffa during the Roman period (Tsuf 2011), an important step toward rectifying the limited data available on the subject to date (e.g., Kaplan 1964).

The work undertaken by Orit Tsuf represents an important first step toward the full publication of Jacob Kaplan's and Haya Ritter-Kaplan's excavations in Jaffa and its necropolis at Abu Kabir, all of which took place between 1955 and 1974. During these years the Kaplans, from their base at the Jaffa Museum of Antiquities, carried out extensive excavations in Jaffa (Peilstöcker 2011). Excavations in areas A (1955–1958, 1970–1974) and C (1961, 1965) were largely research in nature, while excavations in other areas (B, D, F, G, H, Sounding X, and Y, as well as the Harbor) and at Abu Kabir were of a salvage nature during these years as Tel Aviv's southern side gradually developed. While the quality of these excavations and their records vary substantially (see Keimer 2011), the differences in results can be primarily attributed to improvements and developments within the discipline of archaeology as a whole that took place during the same decades. These changes are reflected in the assemblage of finds from the site, which reveals greater breadth and intensity of collection over the two decades during which excavations were conducted. This assemblage, as born out by the present volume, includes not only ceramic remains, but also wide range of other artifacts, as well as faunal and botanical remains, which were collected primarily from the late 1960s on.

Unfortunately, Jacob Kaplan's work in Jaffa ended abruptly following the departure of the mayor of Tel Aviv, Yehoshua Rabinowitz, in the spring of 1974.¹ With no further access to the museum and finds, analysis of the finds and their contexts effectively ended. Many of the paper records from the excavations were evidently taken with Kaplan, which in 2000 were deposited with the Israel Antiquities Authority (Bar-Nathan 2002) and others surfaced in 2012 that were also added to this collection. Finds at the museum were cared for by museum staff and included the generation of an object registry during the early 1990s by Even Ordentlich. This registry served as the starting point for accessing and assessing the collection and its numbering system (i.e., Reg. No.) is employed throughout this volume. It consisted largely of complete and restorable ceramics, as well as sherds of distinctive wares or types, and almost all of the artifacts excavated (excepting those occasionally overlooked within boxes filled with pottery). Thus, many ceramics that were not complete or restorable were not registered and have required the extension of the existing registration system or the generation of new ones in order to refer to them easily.

As this brief history of the excavations and the artifacts reveal, a number of factors prevent a fuller understanding and the most optimal conditions for publishing Kaplan's findings, which Tsuf also notes. First, the location of artifacts and absence of others challenge fuller reconstructions of the assemblage. While most of the finds have remained either on display or in the storerooms of the Jaffa Museum of Antiquities since their excavation, some have not been located. A notable example with respect to the present volume is the absence of a collection of Attic Black Glazed bowls that Kaplan mentions having recovered from Building M in Area A during the 1970s. Neither Tsuf nor JCHP staff succeeded in identifying the whereabouts of this assemblage, which were likely not insignificant given the importance of other finds that were similarly highlighted in Kaplan's preliminary reports. Similarly, the records of the excavations are incomplete. While early excavations, such as those in the Ramesses Gate of Area A took place during the late 1950s and do not appear to have used field notebooks, these appear for most later excavations by Jacob Kaplan, suggesting that other reasons probably account for missing notebooks for some seasons, in particular for some areas during the 1960s. Furthermore, some records have been misplaced or may still be stored in unknown locations, despite

¹ Personal communication, Dina Bar-Lev, 2012.

extensive efforts to locate them. In the summer of 2012, for example, well after the research conducted for the present volume, more than 400 plans were found in a rooftop storage facility at Kaplans' residence. These were mostly daily plans with robust notations from the Lion Temple excavations (1970–1974), but their sudden and surprising appearance serves as a reminder of how uncertain the extent of Kaplan's record keeping is and the sense of what percentage of that collection has been accounted for.

Second, the condition of excavated remains and records following Jacob Kaplan's excavations also impede straightforward reconstructions of contexts. Many metal artifacts, mudbrick samples, and other organic remains are severely decomposed after many years in the humid storerooms of the museum. Many of the primary documents from which contexts can be reconstructed, such as writing on boxes, have seriously degraded, making it sometimes impossible to be sure of artifact's contexts. Such conditions also impede the reconstruction of contexts, which pose a third limitation on the use of the collection. Although for a great many if not most finds contexts can be reconstructed, many "branches" within the stratigraphic hierarchy cannot be fully associated with the excavation's stratigraphy. Artifacts from such "orphaned" contexts are thus only useful as markers of presence and absence of an artifact in Jaffa. Finally, limitations concerning data collection and recording conventions preclude certitude concerning contexts at times. Insufficient elevations—a frequent problem on excavations—are but one example of the challenge of re-situating artifacts and pottery buckets from these excavations. For early excavations, a lack of localized or daily top plans also challenge locating some finds and thus identifying their contexts. Limited photography during the 1950s likewise confines our understanding of the development of the excavation of certain contexts.

Despite these challenges, which are common to many unpublished, legacy archaeological datasets, a great deal can be done with the available materials. The present volume specifically highlights Jaffa's archaeology from the Persian Period to the end of the Byzantine Period. The Persian, Hellenistic, Roman, and Byzantine periods are well reflected in Jaffa's archaeological record both on the mound itself (Tel Yafo) and throughout the lower town from salvage excavations, which include both architecture and a robust assemblage of artifacts. Together they reveal the vicissitudes of Jaffa's history as a port on the eastern Mediterranean that, despite its relatively small size, played an outsized role in connecting the central coast and highlands to the Mediterranean from its earliest history.

Since before the project's inception in 2006 Orit Tsuf began consultations with Martin Peilstöcker on a number of issues concerning the location, evaluation, analysis, preparation, and publication of the materials presented in this volume. Because Orit began this work before the project started, she faced the daunting task of locating, identifying, documenting, analyzing, and making sense of the materials that remained from Kaplan's work. The result was a realization that rebuilding the stratigraphy of the site was not realistically possible alongside the already considerable challenge of analyzing the artifact assemblage of Persian to Byzantine period finds. In consultation with the JCHP's directors, the most reasonable course seemed to address the range of finds, particularly the best examples of types and those recovered from clear stratigraphic contexts, but to leave a more exhaustive effort to reconstruct Jaffa's stratigraphic sequence as a separate project. Part of the stratigraphic analysis to be completed is being addressed by the publication of Bronze and Iron Age contexts underway by Burke and Peilstöcker (see Burke 2011), as well as for the final publication of JCHP excavations in the Visitor's Center (i.e., Area C) in 2008 and 2009 (see Burke et al 2014).

Without repeating the table of contents of this volume, it is perhaps important to underscore that a number of other excavated materials hold considerable potential for further shedding light on the artifacts and the Persian to Byzantine period contexts. The remaining studies have not been neglected, but will be published in future studies and contextualized insofar as possible. Among these are some architectural elements, faunal remains (including fish bones and shells), a few botanical samples from Area A in the 1970s, chipped and ground stone artifacts, stamped jar handles.² Faunal remains are to be published by Ed Maher, fish bones by Omri Lernau, shell by Inbar Ktalav, and botanical remains by Andrea Orendi, chipped stone by Kobi Vardi, and stamped handles by Gérald Finkielsztein. Sadly, residue analyses on previously excavated ceramics demonstrated no foreseeable utility, owing most likely to the fact that all ceramics were thoroughly cleaned

² Coins from Jaffa have appeared in a number of previous studies, as Tsuf notes in her work. Inscriptions, notably those from Abu Kabir, have also been recently published (see Ameling et al 2014).

after excavation.³

The present volume is an excellent example of the important role that the Shelby White and Leon Levy Program for Archaeological Publications has played in bringing such archaeological corpora to press. This is all the more so given that a second grant was provided in 2009 to support the publication of Bronze and Iron Age remains by Burke and Peilstöcker. By way of an extensive effort to digitize all of Kaplan's records and document the assemblage, on more than a few occasions the later effort was able to supply additional artifacts and contextual information some of which were relevant and were, therefore, incorporated into the present study. Additionally, institutional support from the University of California, Los Angeles and Johannes-Gutenberg Universität, Mainz, which agreed to publish this volume, have also supported various aspects of this research. A number of JCHP staff also contributed to illustrations, photography, production of plans, and data entry including George Pierce, Kyle Keimer, Heidi Dodgen, Brett Kaufman, Martina Haase, and Krister Kowalski. We would like thank them for their assistance during this process.

Aaron A. Burke and Martin Peilstöcker, Co-Directors
The Jaffa Cultural Heritage Project

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³ Andrew Koh (Brandeis University) tested several vessels in 2009, which yielded no positive results for traces of residues. Although this was done on Bronze Age vessels, there is no basis for believing that the results would be different for later period materials.

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Preface

The present investigation of Jaffa's archaeological remains is based on Kaplan's excavations, which were conducted from 1955 to 1974. The focus of the present research is the Persian, Hellenistic, Roman and Byzantine archaeological remains of the port city of Jaffa. The Abu Kabir cemetery of Jaffa is also discussed in the Appendix. The archaeological remains from the Middle Bronze Age to Iron Age will be studied in detail by Aaron Burke and Martin Peilstöcker.

During their lifetime, the Kaplan couple published preliminary reports of the excavations. In addition, they published the most significant artifacts, with a direct or indirect connection to historical events (Kaplan 1980/1; Kaplan 1964a; Ritter Kaplan 1982). However, over the past century, several studies have been published. All of them dealt with the historical and political background of Jaffa during the time of the Hasmonean Wars and the Great Revolt. Most of them were based on written historical (Tolkowsky 1928; Radan 1988) and epigraphic sources (Applebaum 1985; Kindler 1954; Lupu 2003; Price 2003). At this point, before proceeding and conducting additional excavations and studies of the remains of Persian to Byzantine periods of Jaffa, it is essential to reconstruct the material culture framework as part of the historical background of the site.

Kaplan left behind an extremely rich assemblage of diverse finds. Some of the artifacts are on display in the Old Jaffa Museum.⁴ The overwhelming majority of the finds were, however, left in the storerooms of the Old Jaffa Museum awaiting final publication. To this day, no complete study has been undertaken of Jaffa's archaeological remains that were excavated by Kaplan. The enormous quantity of objects and finds are of immeasurable importance and are the fundamental basis of the present research. The creation of a complete and comprehensive picture of Jaffa's finds will provide a framework for a deeper understanding of the cultural background of Jaffa's history. For example, the classification of the pottery assemblage and the identification of the "Judean Pottery" from the dwelling house in Area C enables an understanding of Jaffa's Jewish inhabitants and their relations with Jerusalem during and after the destruction of the Second Temple (a full discussion is given in Tsuf 2011:271–290).

Under normal circumstances, namely, with the preservation of all documentation, it might have been possible to arrive at a vivid picture of Jaffa as a port city from the Persian to the Byzantine periods. Unfortunately, the surviving evidence and the available written documentation complicated the current study more than I had first anticipated. The finds are, indeed, diverse and plentiful. However, no written documentation of the most important and longest seasons of excavations has surfaced. For example, the documentation of the 1955 to 1958 excavation seasons in Area A as well as the 1961 season in Area C is limited in nature. Yet both were the main excavated areas and revealed the most significant discoveries in Jaffa. In Area A these included Jaffa's Late Bronze Age Egyptian fortress, the city gate, in addition to Persian and Hellenistic fortifications. In Area C the remains of a Roman period Jewish dwelling were discovered. For both areas, A and C, we lack the diaries and notebooks from the excavation seasons (except for the Area C 1965 diaries) and possess only a few sketches, preliminary area plans, and pottery bucket information. For this reason, after an initial examination of the materials, I realized that the crucial architectural features lacked clear and reliable documentation.

Because of this unfortunate situation, and in order to achieve the best results, I chose to redefine the approach to this project. My first goal was to reconstruct the stratigraphy of the areas according to the best available documentation. I soon realized that in order to avoid a recourse to speculation for the areas that lack critical documentation, I should divide the areas into two categories: areas that were documented in the diaries, and Areas A and C that lack documentation particularly in the diaries. Part I of the study presents a reconstruction of the architectural phasing, which has survived in the documentation in direct relation to the *in situ* finds, as well as a reconstruction of the two main excavation areas, A and C. The comparative discussions are based on the surviving documentation and finds that are presented in Part I and in the catalogues in Part II.

⁴ The museum is currently under the supervision of the Old Jaffa Development Corporation.

My second but no less important goal was to create a full picture of Jaffa's material culture from the Persian to the Byzantine periods. Part II is devoted to the presentation of the complete corpus of Jaffa's finds according to a combined chronological-typological approach. This part presents the material finds discovered in Jaffa during the Kaplan excavations (1955–1982) (see Table 1.1).

Recently more documents of Kaplan's excavations in Jaffa and elsewhere were found. These documents, which include diaries, plans and illustrations, were found stored at his residence. Unfortunately, the new discoveries are not included in this work, since they were not available to me during the time this research was conducted. However, it encourages me to go on and continue my research in the future.

Area	Date of excavations	Architectural remains	Periods
X	1961–1962	Sounding	Persian–Byzantine
C	1961, 1965	Residence	Persian–Byzantine
Y	1964, 1968	Public building	Persian–Early Roman
A	1955–1958, 1970–1976	Public building and fortifications	Persian–Byzantine
G	1964	Pottery kiln	Hellenistic–Late Roman
T	1961–1962	Tombs	Hellenistic–Byzantine

Table 1.1. Description of the areas discussed in this volume.

Orit Tsuf
Tel Aviv 2015

General Introduction

Orit Tsuf

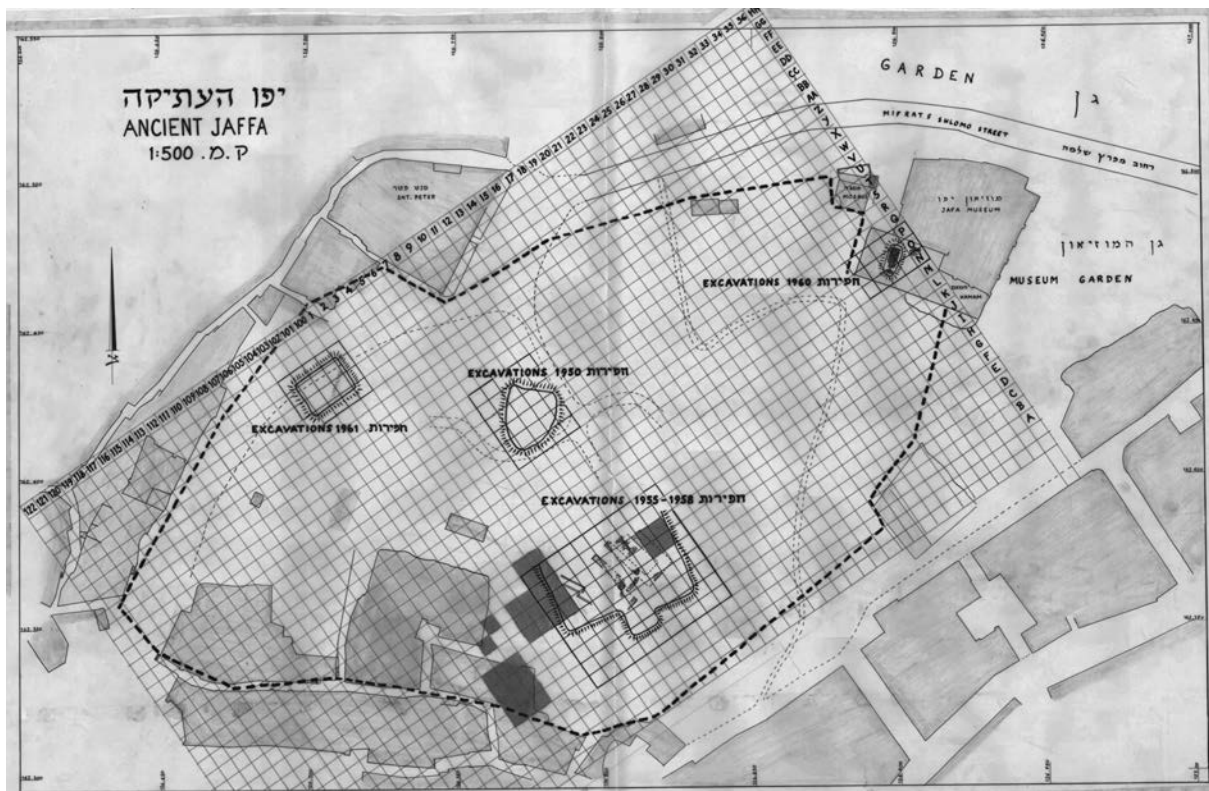


Figure 0.1. Jaffa with Kaplan's excavation grid 1961. Kaplan Archive.

Historical Sources

Jaffa is located on the border of the Plain of Sharon and the Shephelah (the Judean foothills), on the cross-roads of the coastal road and the road leading to Jerusalem. The city was built on a hill rising 30 meters above sea level and 25 meters above the plain. Half of the natural hill (north-west) juts into the sea which provided for the city's defense. Jaffa is one of the few cities in the Levant with a natural anchorage, even though it is not a good one. Josephus described the harbor as dangerous for ships during bad weather (Josephus BJ III, 9, 3 [419–423]).

The strategic location made Jaffa one of the most important and famous cities of the ancient world. Jaffa was known as “the gate to Jerusalem” since time immemorial, and served as such at least until the construction of the Herodian port of Caesarea Maritima during the Roman period and since the Islamic period until modern times. The city was famous throughout the biblical period as the Mediterranean harbor of Jerusalem. During the Persian period Jaffa was a cosmopolitan Phoenician city, the chief Jewish port of the Hasmonean kingdom, and in the Roman period it still remained an important Jewish port (Tolkowsky 1928; Applebaum 1985; Radan 1988).

During the Persian period Jaffa was a central harbor outside Jewish controlled territory. It had previously been given by the Assyrian King to the Phoenicians during Sennacherib's campaign against Judea in 701 BCE. Phoenician occupation of Jaffa is documented in two sources. The first was an inscription found on the sarcophagus of the Sidonian king Eshmun'azar (2nd half of the 5th century BCE). The inscription recorded the fact that the king of Sidon received two harbor cities, “Dor and Joppa, the mighty lands of Dagon, which are in the plains of Sharon, for the Lord of Kings (The Persian King)” (Fischer et al 1996:182). In the second source Jaffa is mentioned as a coastal Sidonian city from the 5th to the early 4th century BCE by the seafarer, Pseudo Scylax, in his work the *Periplus* (Fischer et al. 1996:182, the name Joppa is corrupted). During the

period of Phoenician control over Jaffa, around the year 515 BCE, Zerubbabel rebuilt the Second Temple with cedar from Lebanon which was sent to Jerusalem via “the sea of Joppa” (Ezra 3:7). It is assumed that the harbor was active in earlier times since the prophet Jonah (Jonah 1:3) sailed to Tarshish from Jaffa.

The Hellenistic and Roman historical epos of Jaffa was well attested by the Greek and Roman historians (Notley 2011:95–107). However, Josephus left behind the most significant documentation of Jaffa’s historical background during the revolt of the Maccabees (2 Macc. 12, 3–6), and the Hasmonean campaigns against Jaffa (1 Macc. 10, 75; 12, 33–4; 13, 11–12; 14,5; 15, 28–30,31,35; Ant XIII,15,4 [395]; XIV, 4, 4[76]; XIV, 10,6 [205]; XV, 4,1 [95]; XV, 7,3 [217]; XVII,4 [320]; BJ I, 7,7 [156]; I, 20,3 [396]; II, 6,3 [97]; II, 18,10 [507–9]; III, 9, 2–4 [414–31]).

Most interesting is the fact that many historians such as Diodorus (Diodorus I, 31, 2), Stephanus Byzantinus (Fischer et al. 1996:183 note 456), Dionysius Periegetes (Fischer et al. 1996:183 note 457), and Strabo (Strabo I, 2, 35) continued to link Jaffa with the Phoenicians, even though they were writing in the Roman and Byzantine periods when Jaffa was already part of the Judean territory and dominated by a Jewish population.⁵ In Talmudic sources Jaffa is still mentioned as a harbor (M. *Demai* 1, 11; M. *Nedarim* 3, 6). Cyril of Alexandria (444 CE) described Jaffa as “...a port for goods to be shipped from Judea mostly to cities in the east” (Fischer et al 1996:185). However, during the Byzantine period Jaffa was not a prosperous or substantial city and was probably in ruins (Fischer et al. 1996:185 note 487).

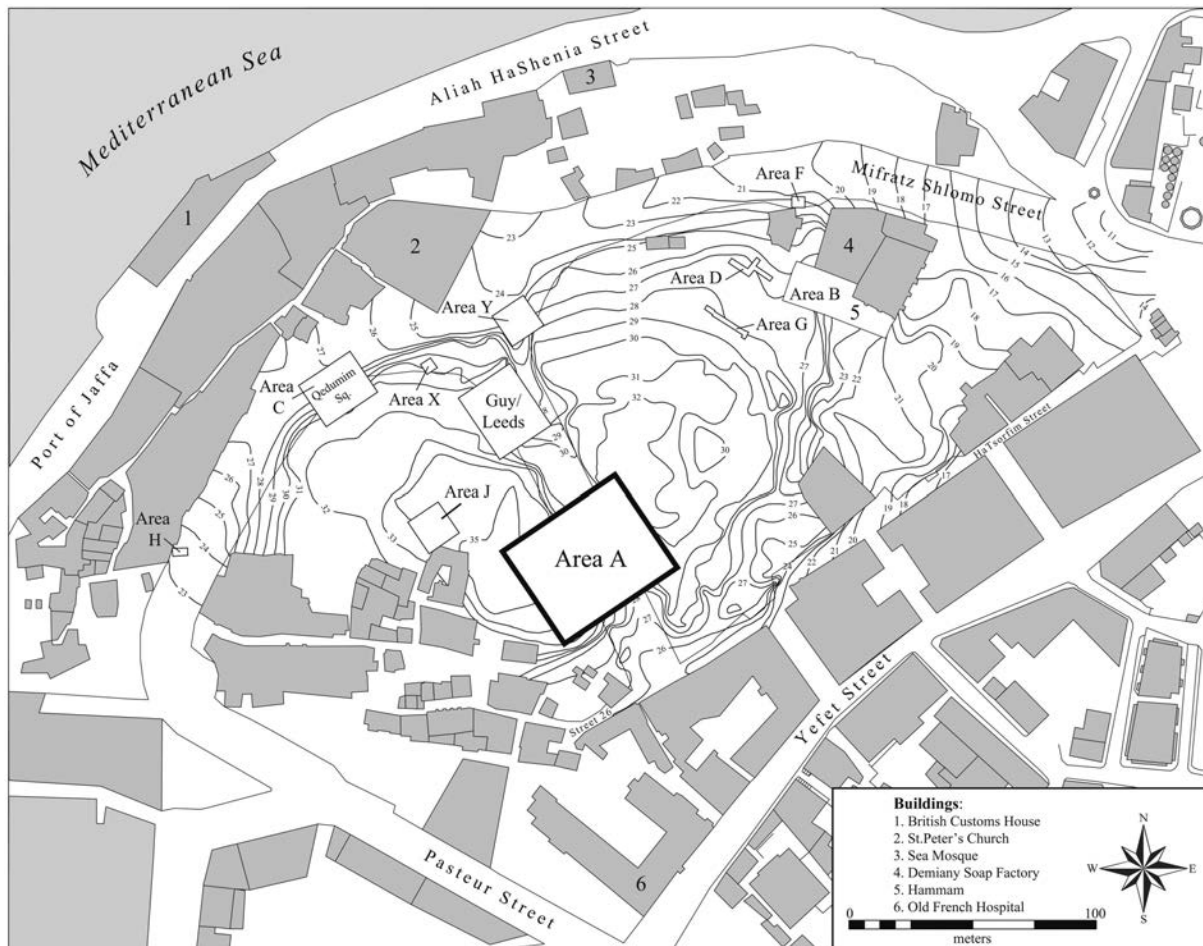


Figure 0.2. Plan of Jaffa with Kaplan’s excavated Areas (Courtesy of the JCHP).

⁵ An inscribed weight from the reign of Trajan mentions an “*agoranomos* Ioudas son of Tozomos,” which was found in the dwelling in Area C (see Chapter 3, pp. 39).

Jaffa is mentioned in 891 CE by Yakubi as a small town and described by Muqaddasi (2nd half of 10th century) as, “A small town on the sea; she is, however, the supply-house of Filastin and the port of Ramle; she has a citadel and an iron gate toward the sea, and the harbor is new” (Fischer et al. 1996:185 note 494).

History of Research⁶

The first archaeological survey by Jacob Kaplan was conducted in 1950 in the northern area of Tel Aviv. At that time very little had been built in the new city and Tel Aviv’s mayor, Israel Rokach, asked Kaplan to carry out a series of excavations in order to extract as much scientific information as possible, “before the on-marching development of the city destroyed them” (Kaplan 1972c:66). In 1951, the mayor also authorized the establishment of an antiquities museum in Jaffa. The museum was first housed at the Abu Kabir university building, but in January 1961 a permanent museum was established in the old Ottoman *saraya* (Kaplan 1972c:66–67).

Before Kaplan began working in Jaffa, two prior excavations had already taken place. The first was conducted on behalf of the Israel Department of Antiquities and Museums (IDAM) by P. L. O. Guy in 1950 who conducted a small scale trial excavation at the northeastern edge of Tel Yafo (Isserlin 1950:101). The main goal was to rescue the archaeological remains that had been left behind at the end of the Mandate Period. During that period much of the old town was demolished because of public health risks, and only selected buildings of historical interest were scheduled for preservation (Isserlin 1950:101). Isserlin expressed his feelings about the condition of Jaffa in his preliminary publication of “some archaeological news from Israel”: “Excavation on a really large scale might, in the case of a tell with a long and important past such as Jaffa, give some highly interesting results, if only the necessary means could be found somehow” (Isserlin 1950:101). Isserlin succeeded in fulfilling his desire two years later, in the summer of 1952, when he joined a single season of excavation on behalf of the Department of Semitics of the University of Leeds. The expedition was directed by John Bowman with the help of B. J. S. Isserlin, R. Nunoo as well as M. Prausnitz (Yeivin 1955; Bowman et al. 1955). The excavation focused on expanding Guy’s trial trench in order to expose the strata below the medieval Arab remains. Isserlin and Bowman extended the excavated trench and reached virgin soil. They assumed that the early occupation stratum was dated to the 5th century BCE. A later building was built during the 4th century BCE, but only the floor in one of the rooms had survived. The walls of the building were renovated during the 2nd century BCE, while the 1st century BCE floor level was elevated. The building was reoccupied during the Byzantine period.

It seems that a desire to expose the biblical and First Temple periods inspired Kaplan to begin his excavations at a different location, the southern edge of the mound, and he moved toward the center of the mound in Area A where he began excavating in 1955. His wish came true, and over the course of the first three seasons of excavations (1955–1956, 1958 and 1960) the eastern part of Jaffa’s Late Bronze Citadel dating from the 16th to the 12th centuries BCE was discovered (Kaplan 1956b:259; 1960a).⁷ He revealed two mud-brick entrance façades and door jambs of the city gate. On one of the stone jambs of the city gate there was an engraved inscription, “Horus the mighty bull, beloved of the goddess Maat, king of upper and lower Egypt.” Kaplan assumed that the city gate was erected in honor of Ramesses II after his battle against the Hittites during the 3rd quarter of the 13th century BCE (Kaplan 1956b:260; 1960a; 1972c:80).

Besides these magnificent discoveries Kaplan managed to locate segments of the Persian and Hellenistic city walls and an “Early Roman tower” (Kaplan 1956a:193; 1956b; 1960a; 1960b:134–135). After the 1959 winter rains, a clear picture of the Early Roman tower was visible. In 1960, the foundation of the citadel’s corners built of dressed masonry blocks was discovered. The structure was identified as a pre-Hasmonean citadel built in the 3rd century BCE (Kaplan 1961:192; 1963c:110). Both structures will be analyzed and discussed in detail within the framework of this study (see Chapter 5, pp. 70–74).

In 1970, after a ten-year hiatus, Kaplan returned to Area A with new goals, “to expose the citadel remains to the west of this entrance façade, which include the administrative and cultic building of ancient Jaffa” (Kaplan 1971:19). However, five additional years of excavations in Area A (1970–1974) produced different

⁶ See Peilstöcker 2011:17–32, for a complete discussion on the history of archaeological research in Jaffa.

⁷ These remains will be published by Aaron Burke and Martin Peilstöcker in a forthcoming study of Kaplan’s excavations of the Bronze and Iron Ages at Jaffa.

discoveries, such as an Iron Age temple, which gives evidence of the so-called “lion cult” in addition to a mudbrick fort dated from the late 13th to early 12th century BCE (Kaplan 1970a; 1971:20; 1972a:10; 1974a:50–51; 1974c; 1975a; 1975b:23). Kaplan presented the results of his excavations in Area A in a series of preliminary reports, resulting in the following stratigraphic sequence (Kaplan 1970a:226):

Early Arab–Modern Arab (Strata 1–3)

Persian to Byzantine (Strata 4–7)

A layer of a varved sand dune (Stratum 8) suggested as an abandonment

Late Bronze to Iron Age (Strata 9–11)

The Persian to Byzantine occupation levels were already revealed during the first season of the renewed excavations in Area A (1970). Two strata from the Persian period were encountered. The first is dated to the 5th century BCE; the second stratum to the 4th century BCE, when the Sidonians governed Jaffa. Kaplan mentioned that “many walls still remained uncovered, including part of a building, paved with clay bricks” (Kaplan 1971:20). The walls were built using piers of dressed stone alternating with a rubble fill, which is typical style of so-called “Sidonian masonry” (Kaplan 1971:20; 1974a:50). At first, the newly discovered structure was interpreted as “a large building which perhaps had been a temple” (Kaplan 1972a:9). The building was connected immediately to the “Persian wall” (W.3), which was exposed during the 1956 and 1958 seasons of excavations (Kaplan 1970a:226). The main element of the newly discovered structure was a wall (W.800), two meters high and built in the ashlar pier-and-rubble style.

W.800 and the balks of the previous season were dismantled in 1970 in order to allow the area of the Iron Age remains to be enlarged (Kaplan 1972b:17; 1974a:33, 50; 1974b:56; 1974c:135). Two detailed sections were prepared. The first section presented the stratigraphy sequences in Area A (Figure 5.1). The second focused on wall W.800 as well as on the remains below it (see Chapter 5, Plan 5.1, with discussion).

During the summer of 1971 a Hellenistic stone altar and the walls of a small hall surrounding it were discovered. The 1972 excavations began with the deepening of the dig around the small recently found altar. The Persian floors were found below the Hellenistic stratum (Kaplan 1972a:9; 1972b:17; 1974a:50; 1974b:56; 1974c:135). The final conclusions of the 1972 excavations determined that the exposed structure functioned as a Phoenician warehouse during the Persian period (Ritter-Kaplan 1982).

The year 1972 was the last one in which excavations of the Persian–Hellenistic complex in Area A were conducted. An additional structure was exposed during the 1972 and 1973 seasons on the slope of the southern rampart of Jaffa’s Bronze Age fortifications. This was a large plastered pool that was interpreted as “a water storage tank for a public building that must have been nearby” (Kaplan 1974a:33, 51; 1974b:58). Kaplan suggested that its later use was as a “clay settling tank for a pottery workshop or workshops...the upper silt layer pottery dated to the 4th century CE” (Kaplan 1974a:33, 51; 1974b:58).

Between the first three years of excavations at Area A (1955–1956, 1958) and the following four years (1970–1974), Kaplan conducted several probe excavations in an attempt to locate more of Jaffa’s main buildings and to understand the general urban plan of the city (Kaplan 1961). The first area (Area B) was the Hammam, the Turkish Bathhouse at the northern end of the tell (plan 1.1). In the following three seasons (1960, 1963, and 1964) the Bronze and Iron Age glacis was exposed in areas B, D, and G (plan 1.1) (Kaplan 1961; 1962a:8; 1963b:18; 1964b; 1965:11). The second area (Area C) was located northwest of Area A, next to St. Peter’s Church, which is known today as Qedumim Square (plan 1.1). This area can be defined as the “Lower Quarter,” which contained the residential houses and the city square (the *agora*). Excavations in the “Lower Quarter” began in 1960 with a small probe (Sounding X), which is today located directly under the Old Jaffa Development Corporation kiosk on the eastern corner of Qedumim Square (plan 1.1). This was probably an attempt to establish the extent of the Bronze Age city. It may have been the reason why Kaplan used a probe to encounter the various phases of habitation down to virgin soil without paying attention to the structures and architecture that were exposed. The main effort was directed at the revealing the cultural sequence in this part of Jaffa. In this respect, the results were disappointing since the earliest strata on the bedrock level did not reach the Iron Age and Bronze Age. Kaplan wrote in his preliminary report on Sounding X that “the absence of Iron and Bronze Age strata at that spot confirm our knowledge concerning the fact that Jaffa’s citadel was smaller than the Hellenistic town” (Kaplan 1962b:11).

During the next seasons (1961, 1964, 1965, 1968) Kaplan devoted his efforts to exposing the Jaffa’s residential quarters, which included excavations in the following areas (plan 1.1):

1. Area C (1961–1962, 1965) in Qedumim Square
2. Area Y (1962, 1964, 1968) opposite St. Peter's Church (Kaplan 1965:11)
3. Area H (1964) in the vicinity of Simon the Tanner Street (Kaplan 1964b:285–6)

Following Kaplan's Sounding X excavations, he devoted a season (1961) to the newly chosen area, Qedumim Square, which was located on the west side of the hill, in the open plaza next to St. Peter's Church only dozens of meters from Sounding X (plan 1.1). The choice of the new site was fortunate. For the first time the Second Temple and post-destruction strata of Jewish settlement were exposed at Jaffa (Kaplan 1963c:111). The 1961 season of excavation was devoted to the exposure of the Hellenistic and Roman occupation levels in Area C. Six occupation strata were exposed, dating from the 7th century BCE to the 1st century CE. The fifth stratum included part of a so-called "cellar" with two entrances to a Hellenistic (3rd century BCE) "catacomb" built of dressed masonry (Kaplan 1962a:8–9; 1962c:149; 1963c:110). A probe section was conducted in the "cellar" floor in order to estimate the number of strata *in situ*. Kaplan wrote: "It at once becomes evident that there are here at least three more occupation strata, and virgin soil has not yet been found" (Kaplan 1962a:9; 1962c:149; 1963c:113).

After three years of investigation at other spots around Area C, Kaplan returned to that area and continued to uncover the northwestern part and additional "catacombs" (Kaplan 1966a; 1966b:282). He mentions briefly the connection of the destruction of the house with the Great Revolt (66–70 CE) and the existing additional "catacombs" that were preserved to a height of two meters (see Chapter 3, pp. 23–27). Kaplan noted the fact that the area was located three meters below ground level. The square in Area C was renovated by the Old Jaffa Development Corporation, which founded a Visitor's Center in Qedumim Square (Kaplan 1966a:34; Brand 1994).

The excavations in Area Y were conducted in three phases. They began on a small scale during 1962 (Kaplan 1963a:10), but were increased in size in 1964 and 1968. In the second season (1964) the Persian–Hellenistic strata and the lower Hyksos remains on virgin soil were discovered (Kaplan 1964b:286; 1965). The structure exposed in the Persian–Hellenistic stratum was defined eventually during 1968 as Jaffa's agora of the Persian period built above MB IIC graves (Kaplan 1968; 1969).

The excavations in Area H (1964) exposed two strata of Hellenistic and Persian occupation below the 18th century fortified tower and above a white, varved dune, which sealed the earlier Iron Age strata of Jaffa (Kaplan 1964b; 1965). In addition to the excavations in the Lower Quarter, Kaplan conducted two more simultaneous excavations that exposed Hellenistic to Byzantine occupation levels. First, in Area T (1961–1962) tombs were excavated near the Clock Tower Square (Kaplan 1963a:10). These were discovered as a result of a salvage excavation in 1961, which was conducted in order to lay a new water line for Jaffa.⁸ Following the discovery, a second season of excavations was conducted in 1962. During both seasons Hellenistic to Byzantine period tombs were exposed. Second, in Area G (1964), in the vicinity of the Hammam (Kaplan 1964b:285) excavations were part of an attempt to locate more of Jaffa's fortifications (Areas B, D, and G). During the excavations a Roman pottery kiln was found embedded in the Iron Age glacis (Kaplan 1963b; 1964b:286; 1965:11).

In addition to finds from the areas discussed above, finds from the following areas are also included in the current volume, though a number of areas lack separate stratigraphic and architectural discussions, such as Pasteur St. (1981), B (1960), the Jan Tirosh Gallery (1964), the Saphilo Gallery (1971, 1982), and areas D (1963), H (1964), and J (1970). These areas do not contain distinguishable Persian to Byzantine architectural remains that permit significant discussion of the stratigraphic contexts.

New excavations in Jaffa were initiated in 1985 by the IAA and have continued until today (Peilstöcker 2011:17–32). During the years 1997 to 1999 Zeev Herzog (Tel Aviv University) conducted two seasons of excavations in Area A. Fantalkin and Tal discussed these excavations recently (Fantalkin and Tal 2009). However, the final results of these excavations await publication. Persian and later period finds that have emerged from excavations by the Jaffa Cultural Heritage Project since 2008 are not discussed in this work.

⁸ IAA Archive (according to note within the notebook).

PART I: STRATIGRAPHY AND ARCHITECTURE

Chapter 1. Introduction

Orit Tsuf

The first part of the study will focus on reconstituting the stratigraphy of the areas, based on the recorded archaeological remains in order to reconstruct the chronological-architectural sequences (Table 1.1 and Figure 1.1). The discussions of the following areas are based upon Kaplan's surviving documentation (e.g., diaries, illustrations, and plans) and on his preliminary publications. The stratigraphy will be reconstructed first of all according to the surviving architectural remains, which were recorded in Kaplan's illustrations and other documentation. The second source for the stratigraphical interpretation are the finds from documentary and/or illustrated loci and buckets, mainly those related to significant architectural remains (floors, wall foundations, etc.). Therefore, the loci and buckets discussed here are only the documented ones. In a regular final excavation publication, some of these loci and buckets may not have been discussed at all.

The main contribution of Part I are a review of and new interpretations of each of the areas discussed, which are presented in the following order:

1. *The Residential and Public Center.* Three areas, Sounding X, Area C, and Area Y, were probably part of a residential quarter and/or public zone dated from the Persian to the Byzantine periods. The three locations are close to each other, and reveal the Persian to Early Roman agora or commercial quarter (Area Y), a high class Persian to Early Roman dwelling (Area C), and Roman/Byzantine remains (Sounding X).
2. *The Sacred or Public Center.* Discovered in Area A were a "Sidonian warehouse" and the Persian city fortifications next to the Bronze Age citadel and city gate. A new interpretation of this area will be discussed.
3. *The Industrial Center.* A kiln was discovered in Area G, near the Bronze and Iron Age fortifications of the city. The kiln was probably part of the Hellenistic–Roman pottery production zone.
4. *The Cemetery.* Several graves were exposed in Area T, outside the Ottoman city wall. The graves were probably part of a Hellenistic to Islamic period cemetery. This research will present the Hellenistic to Byzantine finds.

Areas A and C were the main fields of excavation, according to Kaplan's preliminary publications. The recorded evidence for the Area C excavations is poor and incomplete. The 1961 records are the buckets list and two draft plans of Area C 1961 and Area C 1961, 1965 (Figure 3.1). In addition, during 1965, a second season of excavations was carried out in Area C, which was recorded only in Kaplan's diaries. Area A was not documented except for a few illustrations. Therefore, the main data must be derived from the vast and very valuable finds.

In view of this situation, my efforts were directed toward reconstructing the excavation process in both areas A and C through the creation of two case-study databases. The databases included the pottery reading of the main architectural structures and their related finds. The first database was for the Area A 1970–1972 excavations, which included the Hellenistic buildings M and N, the Hellenistic altar, and the late Roman–Byzantine refuse pit/pool. The second database addressed the Area C 1961 excavations of the Hellenistic and Early Roman dwellings. Each database was treated in the same manner. I first determined the date range of the finds within each bucket and then registered each bucket according to several indicators, which included the elevation of each bucket, the date of the finds in each one, and the location within the area (i.e., bucket, locus, and square numbers). After sorting the data according to each of the above indicators, I realized that it would be impossible and unreliable to attempt to reconstruct the whole process of Kaplan's excavations on the basis of these data alone. It was often impossible, for example, to determine the spatial relationship of the buckets and the loci. Bucket lists lacked explicit correlations between each bucket and the locus from which it was excavated. Furthermore, many buckets lacked basic information such as loci and square numbers, and many contained a mixture of pottery from a very wide range of periods or were not carefully separated according to their architectural contexts. Although I found it impossible to determine secure dates for many of

the loci, I was nevertheless able to relate many buckets with their loci, which turned out to be of great importance. The structures discussed are, however, solely those that I could analyze according to the plans and cross-sections in relation to *in situ* finds. These illustrations form the basic layer of evidence, while the analysis was made through the information derived from the total quantity of finds associated with the locus. The main aim was to reconstruct the chronological contexts of each architectural structure. In order to do so, the finds were recorded within the loci and buckets that are associated with each structure in the illustrations. The pottery and other small finds provided the main means for determining the chronology of each structure and dating the occupation phases. Each occupation level was therefore dated according to its stratigraphic context and associated finds.

The discussion within each area and the interpretation of the documented diaries proceeds with the chronology of the periods encountered, beginning with the earliest period addressed in this work. The research method is based upon three main categories of evidence: 1) structures represented in illustrations (i.e., plans and sections); 2) loci and buckets directly related to recorded structures according to the illustrations; and 3) pottery and other small finds in the context relevant to each structure according to bucket labels. The finds presented appear within the discussions according to two criteria: 1) homogeneous assemblages from across several areas arranged by plates, and 2) select finds discussed in Part II according to their catalogue numbers. All artifacts are presented according to their catalogue number, which appears in square brackets.

Areas that are not discussed in the following chapters include B, D, H, and J. Areas B, D, and J are characterized mainly by Late Bronze and Islamic finds and will be discussed in Aaron Burke and Martin Peilstöcker's publications, while Area H contains random Hellenistic finds with no stratigraphic contexts.

Chapter 2. Sounding X: Persian to Byzantine Remains

Orit Tsuf

Introduction

The excavation of Sounding X was begun in December 1960 and continued until December 1961 (Kaplan 1962b:10). The only surviving excavation documentation is the field diary by Avraham Yosef. Sounding X was located east of St. Peter's Church, next to Area Y and Qedumim Square (Area C) (Figure 1.1) and directly below the present location of the Old Jaffa Development Corporation kiosk. It is unclear why the excavators identified Sounding X as a pit. However, it was described in the diary as a "trial dig." In addition to the notebook, four section drawings of the pit and one drawing of Floor 1 have survived (Figures 2.1–2.5). Nine occupational strata were encountered according to Kaplan's illustrations. These were dated from the Iron Age to the Islamic period, with no identifiable portions of buildings. The discussion of the stratigraphy that follows is reconstructed on the basis of the diary and follows Kaplan's chronology and terminology concerning the architectural features he encountered, unless new observations were made. The finds are discussed according to their stratigraphic context for each stratum. The stratigraphic discussions focus on Strata 8 to 6, which include Persian, Roman, and Byzantine remains.⁹

Stratigraphy

Stratum 8: Persian

This stratum was identified as a "Persian stratum." Kaplan noted the appearance of a Persian spearhead, which is most probably the butt of a Persian spear [no. 11.107].

Stratum 7: Early Roman

This stratum was defined by two substrata: Stratum 7a, below the Early Hellenistic Stratum 7; and Stratum 7, the Hellenistic pre-Hasmonean period Floor 2 with an ash deposit. Kaplan associated a Rhodian amphora to Stratum 7a, which was actually a late Hellenistic Cypriot amphora (Figure 2.6:1). In Stratum 7a he also identified Hellenistic pottery, lamps, and coins. However, the pottery associated with this Stratum (below Floor 2) also included Early Roman finds. Therefore, Stratum 7a was probably the Early Roman sub-floor fill of Floor 2.

Discovered on Floor 2 were two *kurkar* stone weights or anchors (Figure 2.6:2–3),¹⁰ a bronze Antiochus Epiphanes IV coin (175–164 BCE), and two lead weights inscribed with Greek letters (Figure 2.6:4–5). These finds were illustrated in the eastern section and Floor 1 plan (Figures 2.1, 2.5). However, in addition, the above artifacts were exposed in association with the Floor 2 Early Roman pottery dated until the 1st century CE. The latest artifacts from both Stratum 7a below and Stratum 7 above Floor 2 date it to the 1st century CE.

W.2 was attached to Floor 2 (Figure 2.4). Floor 2 was disturbed by a *ṭabun*, which appeared in Stratum 6 (Figures 2.1–2) and in the W.1 foundation trench, which cuts through both Floors 1 and 2 (Figure 2.2).

⁹ Strata 1 to 5 contain mainly mixed pottery attached to stone collapse, which was probably connected to the late Islamic wall (W.1). Stratum 9 was dated by Kaplan to the Iron Age.

¹⁰ The weights were identified by Kaplan as wine-press weights (see east section; Figure 2.3), while in the top illustration of Floor 2 (Figure 2.2) they were identified as stone weights or anchors.

No.	Stratum	Bucket	Type	Form	Period	Material
1	7	42	Amphora	Cypriot	3 rd Century BCE	Ceramic
2	7	38	Anchor			Kurkar
3	7	38	Anchor			Kurkar
4	7	35	Weight		Persian	Lead
5	7	35	Weight	Greek inscribed	Persian	Lead
6	6	33	Lathe	Cahill 1.a. I.1	Early Roman	Chalk stone
7	6	33	Bowl	Cahill 2.a.ii A	Early Roman	Chalk stone
8	4	10	Closed lamp		Late Byzantine	Ceramic

Table 2.1. Selected finds from various buckets.

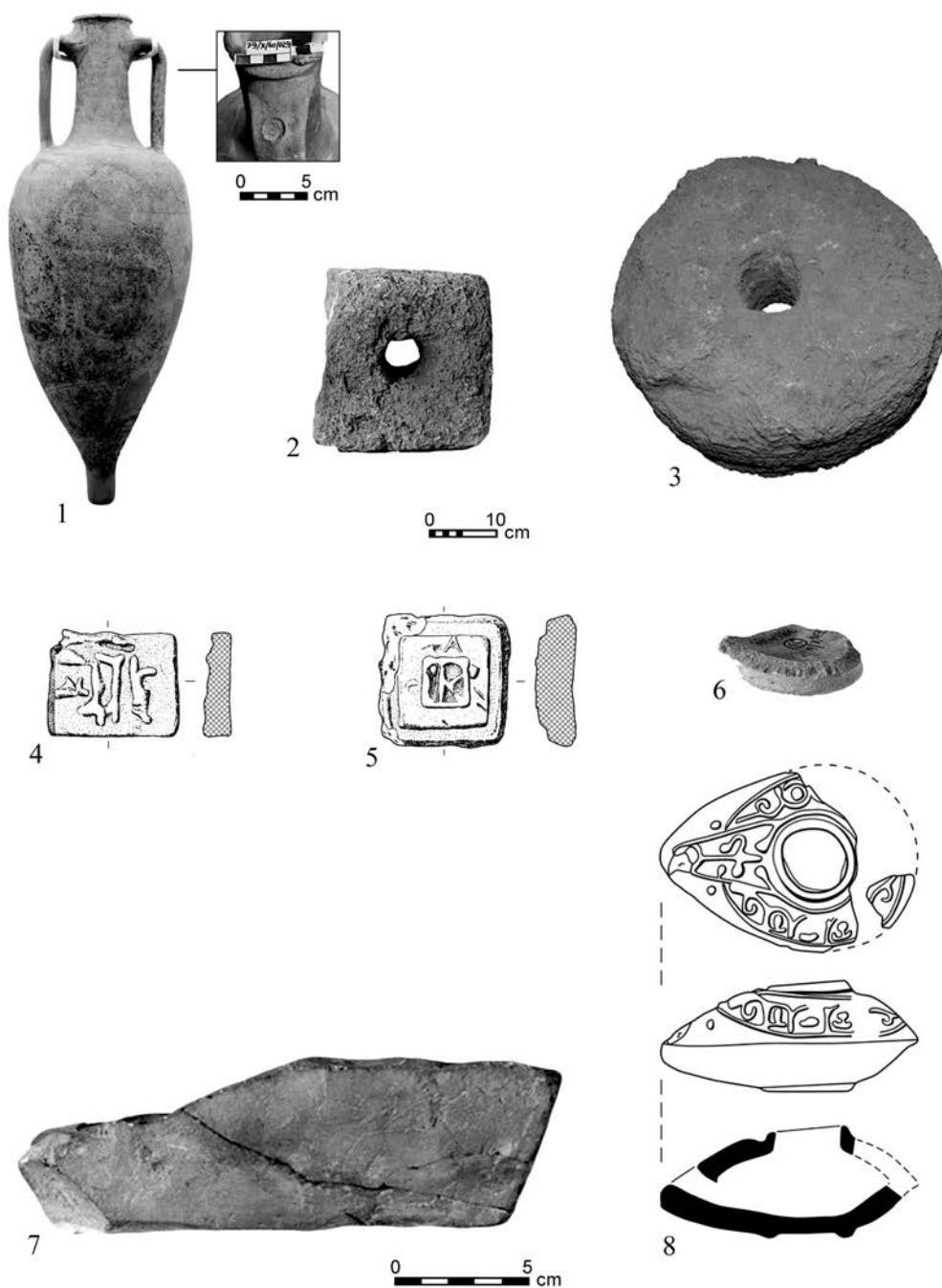


Figure 2.1. Selected finds from various buckets.

Stratum 6: Early Roman

Stratum 6 was considered to be an “ash layer that also contains Floor 1” (Figures 2.1 and 2.5). Floor 1 was identified by him as a Hasmonean floor. It was overlaid by the ash layer of Stratum 4 and attached to W.2 (Figure 2.4), and it was disturbed as well by the foundation trench of W.1 (Figure 2.2). The diary describes the appearance of “many Hasmonean sherds” on Floor 1 (PBs 31–32). However, the associated finds above Floor 1 included 1st century CE ETS A sherds and Judean chalk bowls (Figure 2.6:6–7), which suggest activity until the 1st century CE.

Stratum 5: Mid-Roman

This stratum was identified as a “Hellenistic–Roman stratum,” and consists of a 1.40 m thick layer of dark red color (Figures 2.1–4). In the southern and northern sections (Figures 2.2, 2.4) collapsed building stones, which may have belonged to a wall, were revealed. In the eastern section a complete cooking pot was exposed within the stone heap (Figures 2.1–2.2). Kaplan dated this cooking pot to the Roman period [8.364]. Similar examples of intact cooking pots were discovered in Area G [8.362–8.363, 8.365]. I suggest that these vessels were manufactured in Jaffa during the 2nd–1st century BCE (See also Chapter 6 pp. 122).

Stratum 4: Roman–Byzantine

Stratum 4 was described in the diary as a “Roman–Byzantine phase” with the remains of “stones heaps.” It consists of a one meter thick ash layer (Figures 2.1–2.2, 2.4). The burnt deposits contained a thin soil core with an ash layer above and below. Stratum 4 is cut through by W.1 (Figure 2.2). In the eastern part a few fallen stones were found, which were probably part of a wall collapse dated according to the pottery to the late Hellenistic to Late Byzantine periods (Figure 2.6:8). The stratum was described as consisting of “mixed Roman and Arabic pottery.” The pottery was indeed mixed and dated from the Early Hellenistic and Early Islamic periods.

The following three strata were not studied in detail, since the data are limited and lack architectural contexts. The strata consist of two layers of Early Islamic accumulations (Strata 3–2), which were divided by Kaplan using a different color for each layer below the late Islamic debris (Stratum 1).

Conclusions

The best preserved contexts exposed in Sounding X were Floors 1 and 2. It seems that both of them demonstrate an occupation phase during the Early Roman period. Floor 2 and below the layer (Strata 7 and 7a) were dated by Kaplan to the Early Hellenistic period, yet the associated finds on the floor which were connected to the occupation phase seem to be of the 1st century CE. Floor 1 was dated by Kaplan to the Hasmonean period. According to my study, however, it should be dated to the Early Roman period (1st century CE). The ash layer and Floor 1 were probably the destruction phase of Floor 2. Therefore, it may be assumed that the building went out of use during the 1st century CE.

Floors 1 and 2 were connected to objects that reflect quite clearly the activities associated with them. On Floor 2 a rectangular and a rounded stone weight were found. A *ṭabun* was discovered on Floor 1. Kaplan’s suggestion to identify the rounded weight as an anchor seems logical, since Sounding X was located in the backyard of the dwelling in Area C. The anchors were probably in secondary use in the Hellenistic courtyard (Strata 7 and 7a), while the *ṭabun* presents the everyday activity of cooking and baking in the Early Roman courtyard (Stratum 6). Both are typical of houses in the Roman period.

Above Floors 1 and 2 were Roman–Byzantine and Early Islamic fills with no identifiable architecture. The uppermost level is dated to the Early Islamic period and featured only a single wall (W.1), which penetrated down through Floors 1 and 2 to the Persian level (Stratum 8).

This investigation of Sounding X may contribute in some respect to understanding Kaplan’s motivations for excavating here. His efforts were probably an attempt to learn more about the area around St. Peter’s Church. Sounding X was, therefore, a kind of probe, which turned out not to be very illuminating. In light of

the poor architectural remains and limited horizontal exposure, it appears that Kaplan began new excavations in July 1961 in what became Area C, adjacent to Sounding X, and this area became the main excavation area in this part of the city.

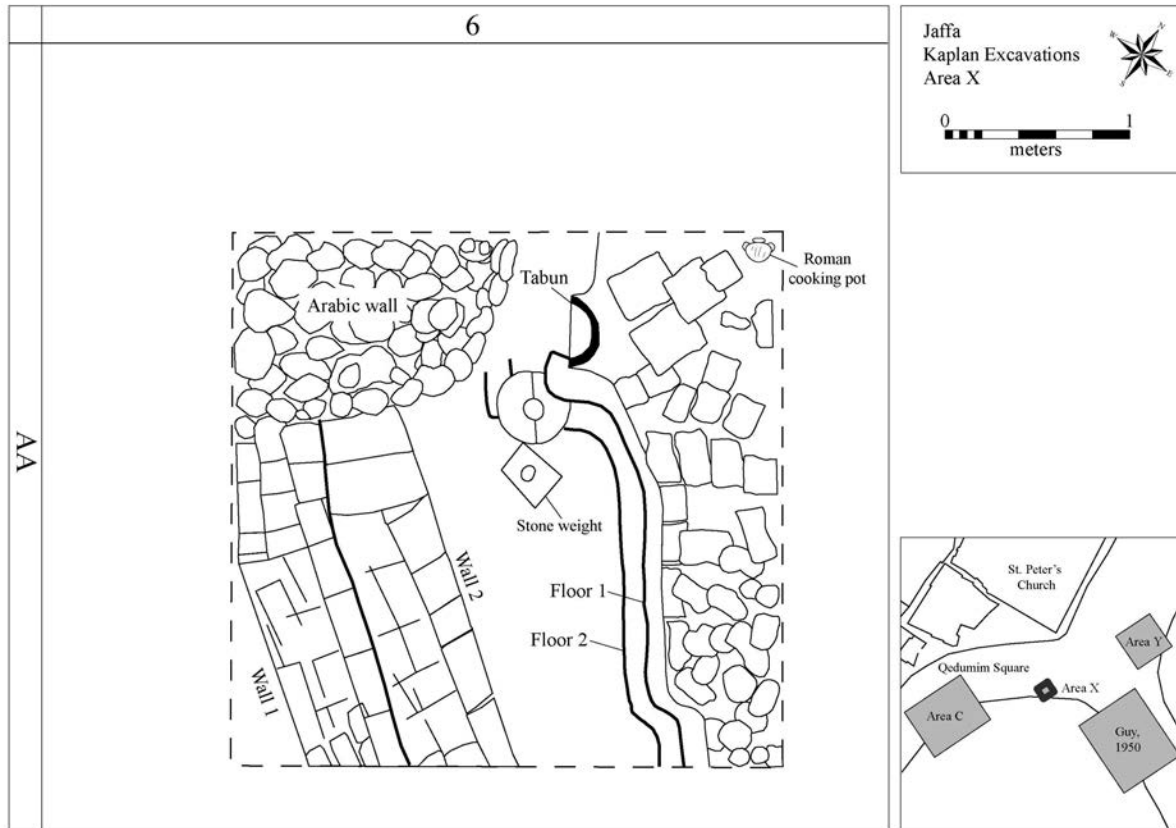


Figure 2.2. Sounding X (Courtesy of the JCHP).

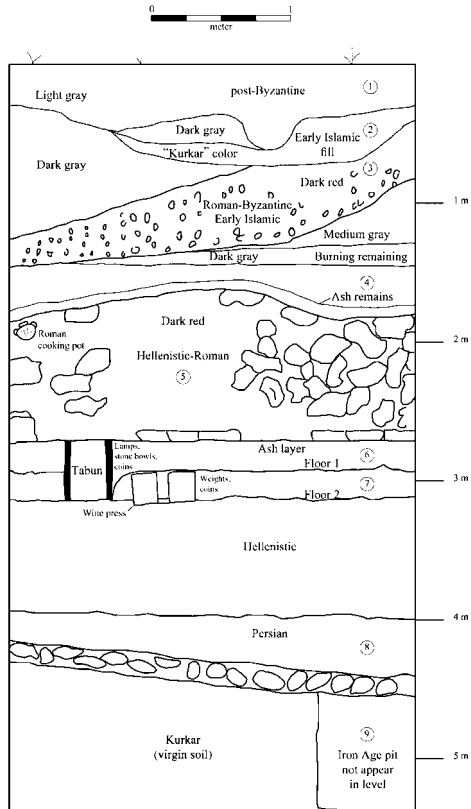


Figure 2.3. Sounding X, east section.
Courtesy of the JCHP.

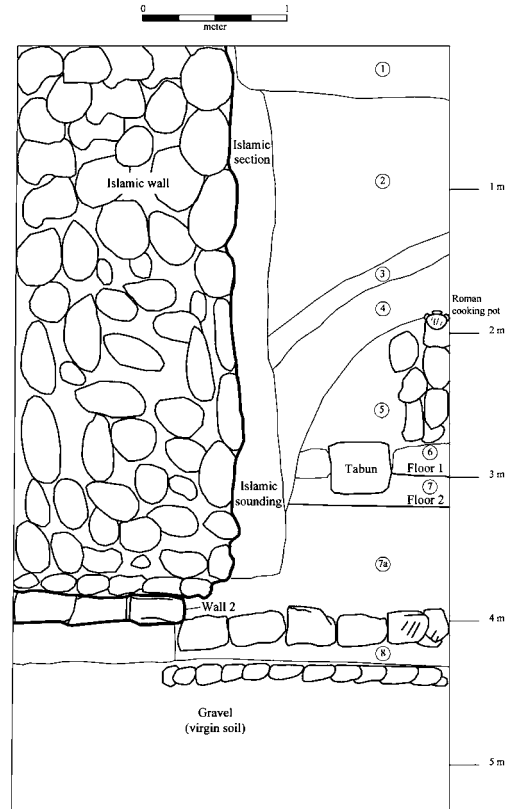


Figure 2.4. Sounding X, north section.
Courtesy of the JCHP.

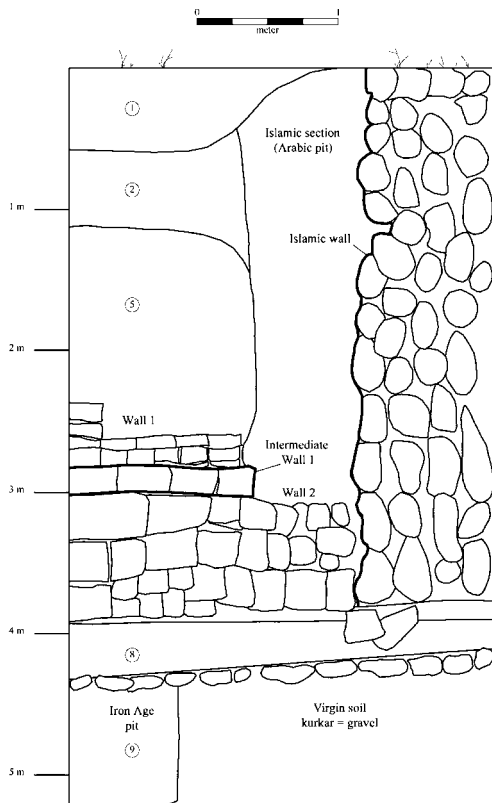


Figure 2.5. Sounding X, west section.
Courtesy of the JCHP.

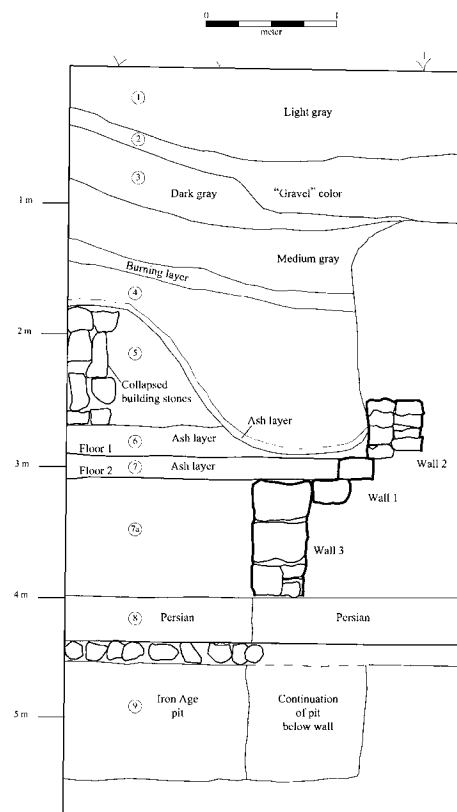


Figure 2.6. Sounding X, south section.
Courtesy of the JCHP.

Chapter 3. The Residence in Area C

Orit Tsuf

Introduction

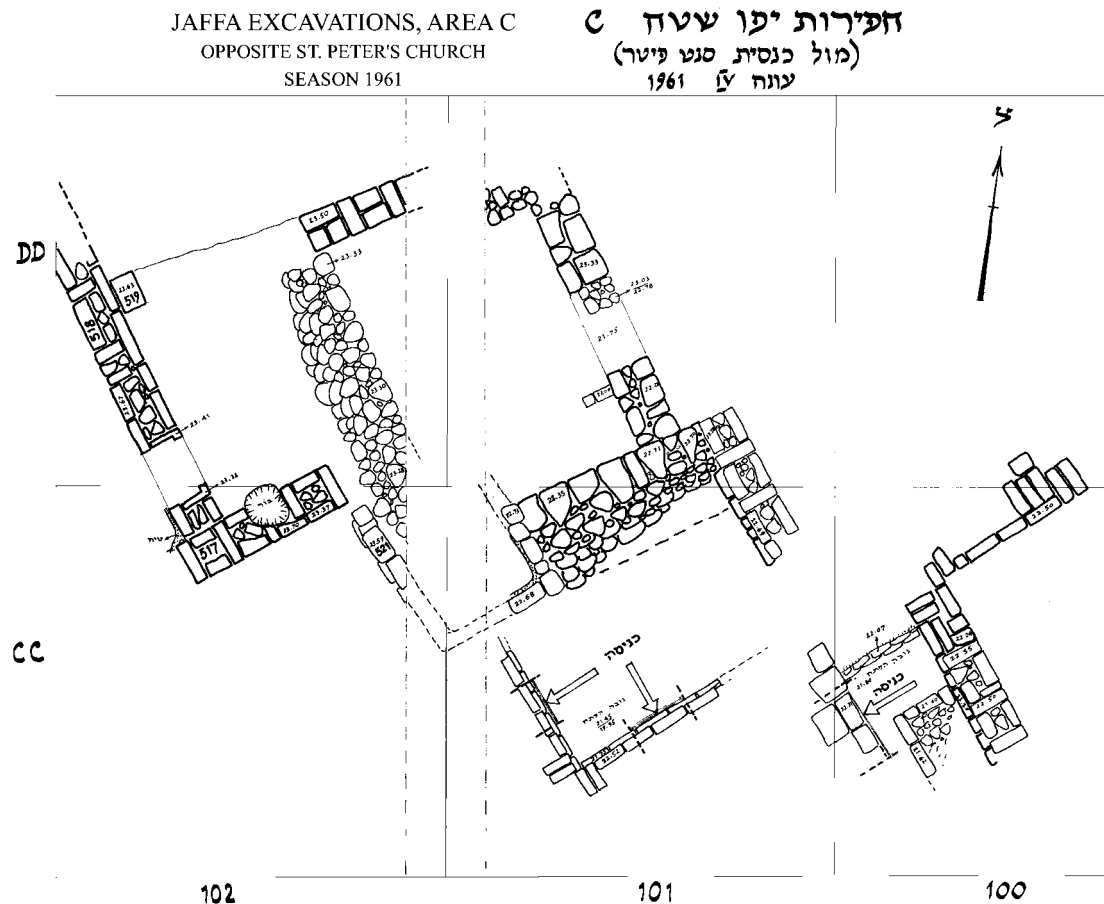


Figure 3.1. Area C (1961). Kaplan Archive.

Area C is located in Qedumim Square (Figure 1.1). As Kaplan noted “the new excavated field is located west of the fields excavated in the three previous seasons (i.e., Area A, 1955–1960) and close to Saint Peter’s Church” (Kaplan 1962a:8). The main excavations were carried out during the fifth (1961) and ninth (1965) seasons of excavation (Figures 3.1–3.2). During the excavations, six occupation levels were exposed dating from the Hellenistic to the Early Islamic period (Kaplan 1962a; 1962b:11–13; 1962c). The area was reticulated with a grid of eight squares (DD100–103; CC100–103) of 5 x 5 m each. Squares DD 101–102 and CC100–101 were excavated during the first season (1961) (Figure 3.1). Three more squares (CC102–103 and DD102) were excavated during 1965. In its final stage Area C extended to 20 x 12 m and penetrated to ca 20 m ASL. Although Kaplan defined the 1965 season in the notebook as “cleaning a collapse due to the winter rains,” the excavation was extended toward the western part of the building. The excavation focused upon four strata (Kaplan’s Strata 1, 2, 5 and 6) out of the six identified strata. Kaplan described the following details in a preliminary report dated 1 December, 1965:¹¹

In the western part of the excavation we recovered the continuation of the building, which was destroyed during the Great Revolt, and in the northwestern part we recovered more parts of the cellar house, which was destroyed by fire during Trajan’s time. On the eastern side of the excavation we

¹¹ From the IAA Archives.

found the extension to the Catacomb complex (which was exposed during the 1961 season) dated to the 2nd half of the 3rd century BCE (Plan 3.1, Figure 3.2).¹²

An additional salvage excavation in Area C was conducted from July to September 1990 under the direction of E. Brand on behalf of the IAA. The main goal was to expose the layout of the ancient dwelling house before the construction of the Visitor's Center in Qedumim Square (Area C).¹³ The Brand excavation concentrated on four narrow strips surrounding Kaplan's excavations (Brand 1994:fig. 75). Six occupation levels were recovered dating from the 5th century BCE to the post-3rd century CE.¹⁴ Brand's additional excavation extended the area to 18 x 27 m.

During July 2008 and July 2009 excavations were conducted by the JCHP before the renovation of the Visitor's Center. Exploratory probes were opened within squares CC100–101 and DD101.¹⁵

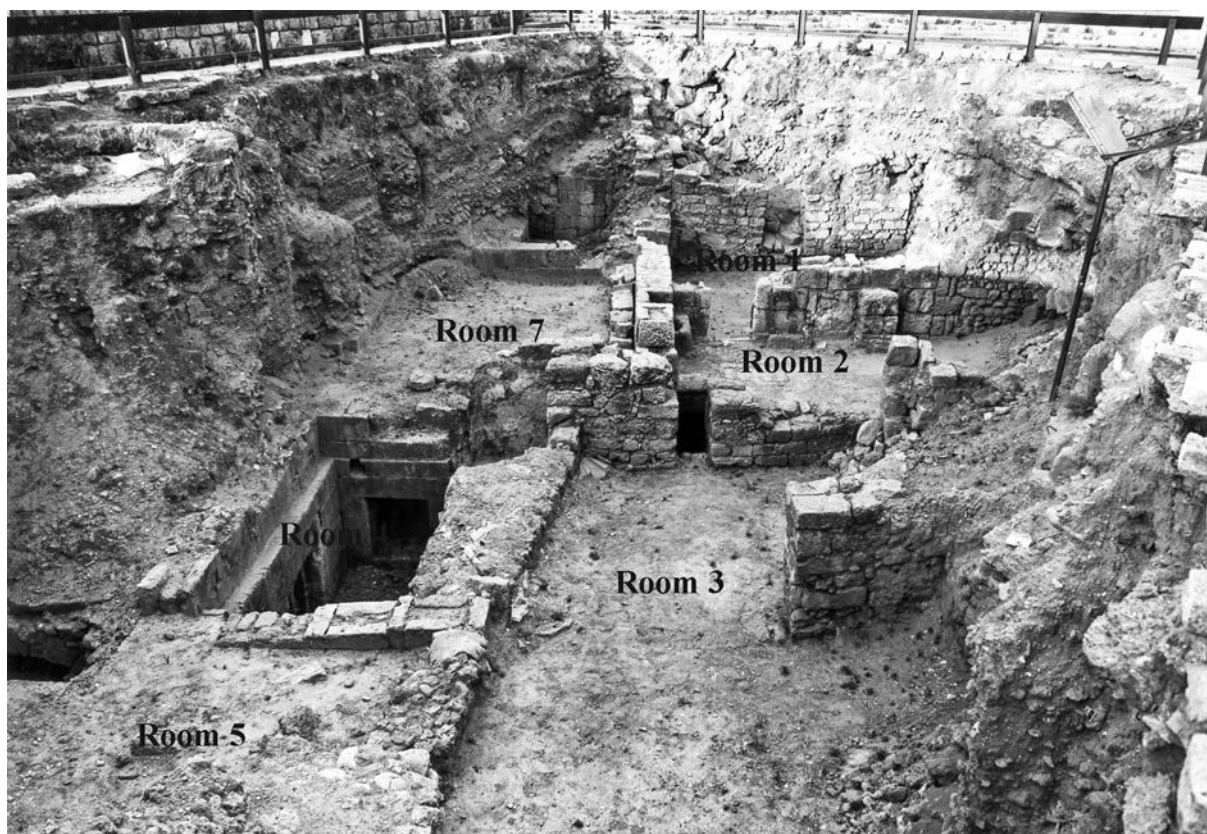


Figure 3.2. Area C, looking west. Kaplan Archive.

Remains	Elevations (m ASL)	Stratum	Chronology
Catacomb (ground Floor)	20.60–19.55		3 rd BCE
Plastered Floor	22.63–22.00	6	1 st CE
White lime floor	24.56	5	2 nd CE
Stone pavement	25.00–24.15	4–3	3 rd –4 th CE
Byzantine floor	25.60	2–1	5 th –6 th CE

Table 3.1. Archaeological remains in Area C based on Kaplan's documentation.

¹² Kaplan's notes are in Hebrew; this and other quotations were translated into English by the author.

¹³ Brand 1994 (Permission No.1890). The final manuscript was never published and a copy of it was handed to me by the directors of the IAA Archives. I would like to thank Etty Brand for letting me mention her unpublished manuscript and Arie Rochman–Halperin for his help.

¹⁴ Brand's strata was as follows: Stratum 6 – 5th–4th century BCE; Stratum 5 – 2nd century BCE; Stratum 4 – 2nd–1st century BCE; Stratum 3 – 1st–2nd century CE (renovation of the structure); Stratum 2 – 2nd–3rd century CE (Industrial area); Stratum 1 – post-2nd/3rd century CE.

¹⁵ Burke and Peilstöcker 2009:fig. 2; Burke, Peilstöcker, and Pierce 2014.

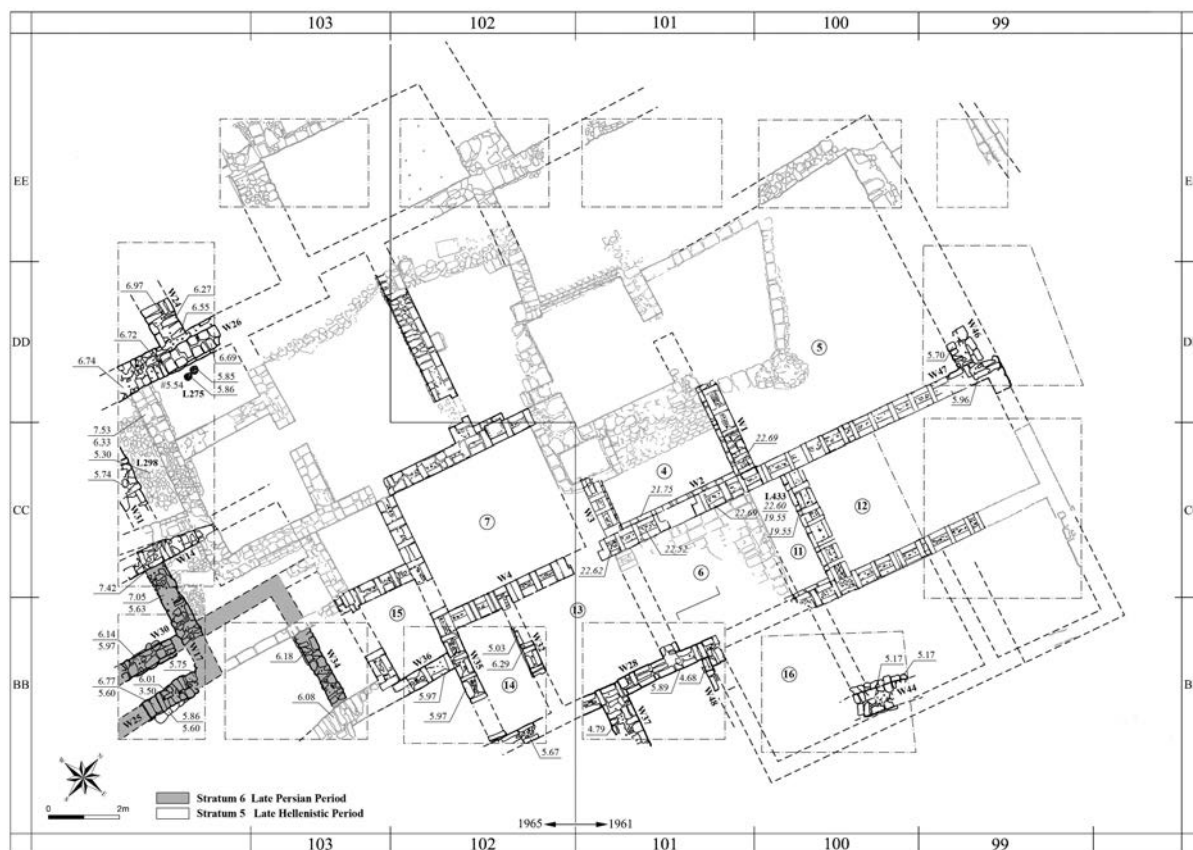


Figure 3.3. Area C, Strata 6–5.

Stratigraphy

The fundamental criteria for the stratigraphic sequence are Kaplan's main excavated structures (architectural remains and floors), which revealed four clear occupation levels according to elevations (Table 3.1).

The final stratigraphy of Area C is based upon the following criteria (Table 3.2):

1. Kaplan's stratigraphy as reported in the preliminary publications.
2. Identical structural remains which were excavated at the same elevation and can be integrated into one structure or stratum.
3. The stratum/level elevations of significant structures.
4. Pottery date ranges of various loci from Kaplan's excavations.
5. Brand's excavations.

The description of Area C will follow Kaplan's original squares division with additional squares related to Brand's excavation strips (EE/DD/CC/BB/99, EE/DD/CC/104). The rooms within the building received running numbers.

Stratum 6: Late Persian

Meager remains of a structure were exposed during Brand's salvage excavations. Four Persian walls (W.17, W.25, W.30, W.34) were revealed in square BB104, dated to the early 4th century until the 2nd century BCE (Figure 3.3). In addition, during the JCHP 2008 excavation, a wall of undressed stones was exposed below the Hellenistic ashlar wall which seems similar to the Persian masonry exposed in Area A (Burke and Peilstöcker 2009:224, fig. 4). Additional support for the existence of a pre-Hellenistic structure may be provided by the large amount of Late Persian pottery found during Kaplan's excavations in Square DD101, which originated stratigraphically from the fill below the Hellenistic stratum (at elevations 20–21 m ASL).

Kaplan	1963		1965		Brand	Tsuf
		CC102	CC103	DD103		
						6 Persian
					5 Late Hel- lenistic 2 nd -1 st BCE	5 Late Hel- lenistic
	CC100: Pit 2, L433 H. 22.60–19.55					
6 1 st CE Vespasian Period	CC101: Stone Inscription H. 20.80–20.55		L451 PBs 1033, 1037, 1041 H. 22.63–22.33	L456, PBs 1028– 1029, 1032, 1038, 1040 H. 22.63–22.30	4 1 st CE	4 1 st BCE– 1 st CE Early Ro- man
	DD102 L432 Room 2 H. 22.45–22.37			L458, PBs 1039, 1042, 1052 (Pit?) H. 22.00		
				PB 1044		
5 2 nd CE Trajan Pe- riod					3 1 st -2 nd CE	3 1 st -2 nd CE
	DD101 Loci 428–429, 434 H. 22.25–21.70					
4–3 3 rd -4 th CE	DD102-CC102: Pit 1 H. 20.50–20.00	PB 920 H. 24.90– 24.80	PB 923 H. 25.00–24.70		2 2 nd -3 rd CE	2 2 nd -4 th CE
	DD102 (Un- known loci) H. 24.40–24.15			L439, PB 897 H. 24.72–24.62		
	DD102: Loci 407, 416 H. 24.67–24.55					1 4 th -6 th CE
	DD102: L417 H. 24.98–24.40					
2 5 th CE	DD100: L414 H. 24.70–23.65		PBs 899, 907– 911 H. 25.60–25.25		1 4 th -6 th CE	
1 6 th CE		PBs 901, 902 H. 25.62– 25.48	PBs 844, 842 H. unknown	Loci 439, 440, 441, 443, 445		
	DD102-CC102 Loci 401, 404, 406, 408 H. 25.60–23.34					

Table 3.2. Stratigraphic sequence in Area C (1961, 1965, and 1990)

Stratum 5: Late Hellenistic

The Hellenistic building was built above remains of the Persian period Stratum 6. The architectural remains associated with this stratum show uniform masonry of high quality. The walls are constructed of well-dressed ashlar blocks laid in alternative header-stretcher masonry (Figures 3.4–3.7). It seems that the structure was

originally a two-story building with the upper floor pavements supported by the arched ceiling of the ground floor (Figures 3.8–3.9). The walls are aligned along a northeast to southwest axis. The southern part of the Hellenistic house was preserved in a relatively good condition even though it must have suffered some unknown destruction event (sqs. CC100–103; CC103/DD103). Most of the header-stretcher walls were preserved in CC squares. In addition, most of the pottery within the CC squares associated with Stratum 5 is dated to the Late Persian–Hellenistic period.

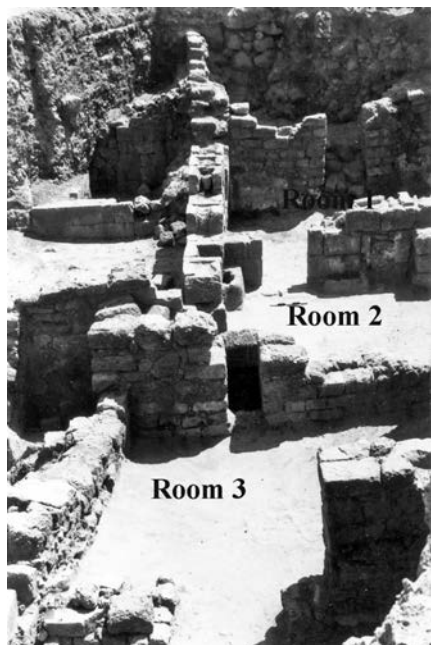


Figure 3.4. Rooms 1, 2 and 3, looking west. Kaplan Archive.

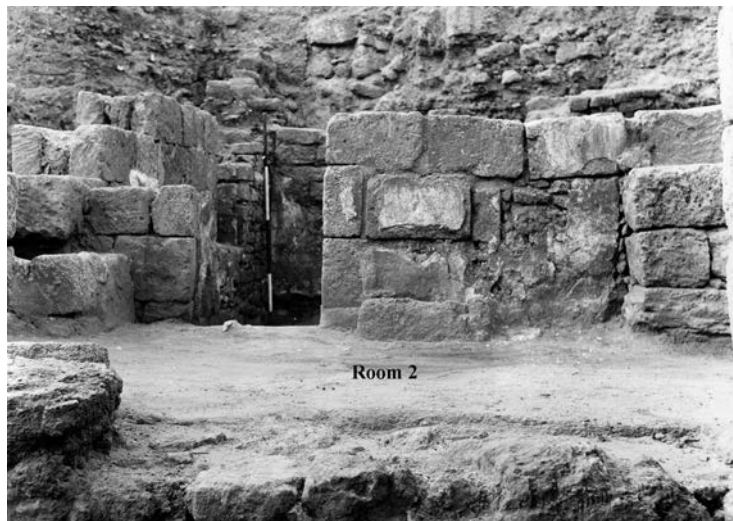


Figure 3.5. The entrance to Room 1, looking toward W518. Kaplan Archive.



Figure 3.6. The plastered W517 (Room 1), looking south. Kaplan Archive.



Figure 3.7. The Plastered W517 (Room 1), looking east. Kaplan Archive.

The Ground Floor. The ground floor was identified by Kaplan as a Catacomb (Kaplan 1962c:149) (Figure 3.10), though this was actually the first floor of the building (see Burke et al 2014:46–47). The Catacomb comprised three chambers entered from a small courtyard (Room 4). According to the remains of the upper floor, the ground plan of these chambers may be reconstructed as being arranged around the entrance courtyard (Room 4) from which doorways led to the three chambers located on its east, south and west of the courtyard (Figures 3.11–3.12). Room 4 reaches down to 19.55 m below ground level and the walls were built in the header-stretcher masonry style. The western wall (W.1), which was preserved in good condition was located above the Persian wall (W.1024)¹⁶ and preserved up to an elevation of 22.62 m ASL. The southern

¹⁶ Burke and Peilstöcker 2009:224.

(W.2) and eastern (W.3) walls followed the same style and reached an elevation of 22.55 m ASL. The rest of the ground floor walls have not yet been exposed but were most probably built in the same header-stretcher style of construction. The chambers were roofed with stone slabs which served as the pavement of the upper floor supported by arches (Kaplan 1962c:149). The courtyard (Room 4) is enclosed on the north and south by ashlar walls built in the header-stretcher technique. According to the architectural style, the structure was dated to the 3rd century BCE.



Figure 3.8. Arched ceiling, probably in Square CC101, looking east. Kaplan Archive.

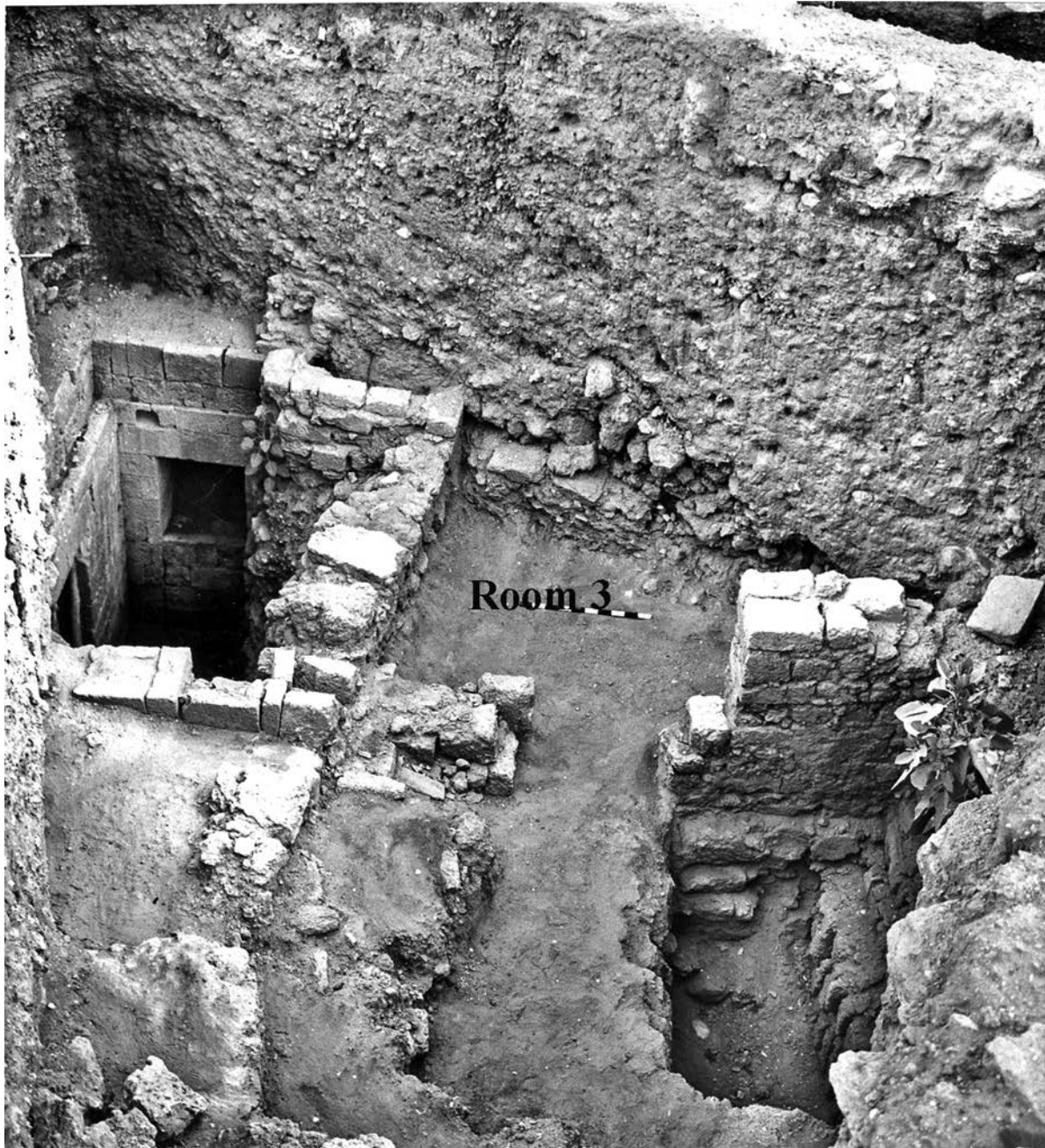


Figure 3.9. Arched ceiling, probably in Square CC101, looking east. Kaplan Archive.

Even though Kaplan did not expose other parts of the ground floor, he mentioned that: “At the end of the excavation (1961) an attempt was made to estimate the number of strata *in situ* by digging a trial pit in the cellar floor [Kaplan’s Stratum 5]; at once it became evident that there are at least three more occupation levels, and the virgin soil has not yet been found” (Kaplan 1963c:113). The trial pit mentioned by Kaplan as Kaplan Pit 2 was identified as a probe (Figure 3.3, Room no. 11). This probe was located in Square CC100, between elevations 22.30 and 20.35 m ASL (L433) and finally reached an elevation of 19.55 m ASL. Pit 2 seems to have been an attempt by the excavator to search for the lower levels of occupation below the Hellenistic arches, which were identified by Kaplan as a Catacomb but were actually the ground floor of the Hellenistic dwelling (Figures 3.8–3.9). The pottery from Pit 2 was dated from the Late Hellenistic to the Early Roman period.

The First Floor. The first floor walls were built as expected with the same technique. Room 4a of the first floor formed by the same W.1, W.2 and W.3 of the ground floor (see above), which are similar in plan to Room 4 on the ground floor. Evidence for the pavement of the first floor can be seen in the ledge on the inner side of W.1–W.3 at an elevation of 21.75 m ASL (Figure 3.11). Wooden beams supported the unpreserved pavement of the first floor. Room 6 was exposed on the east side, and the entrance to Room 13 was located on the north corner (W.4). The exposure of seven additional walls (W.32, W.35, W.36, W.28, W.37, W.48, W.44) during Brand’s excavations (Sqs. BB/CC/DD/EE 99–103) helps to identify the additional rooms (Rooms 14–16) located to the south of those excavated by Kaplan. On the western side, two more rooms (Rooms 5 and 12) were identified (Sq. DD99) which were bordered by wall W.46.

Within the eastern strip of Brand’s excavations (Sqs. CC/DD104) additional Hellenistic walls built with the header-stretcher technique were exposed (W.14, W.31, W.26). Late Hellenistic plastered floor (2nd century early 1st century BCE) (L.275) was attached to W.26 (Square DD104). Late Hellenistic foundation floor (L.298) appeared below Early Roman wall (W.13) (Square CC104) (Figure 3.3).



*Figure 3.10. Room 3 and the lower Catacomb, before extending toward Rooms 2 and 1, looking west.
Kaplan Archive.*



Figure 3.11. Room 4 (the cellar/entrance to catacomb complex). Kaplan Archive.

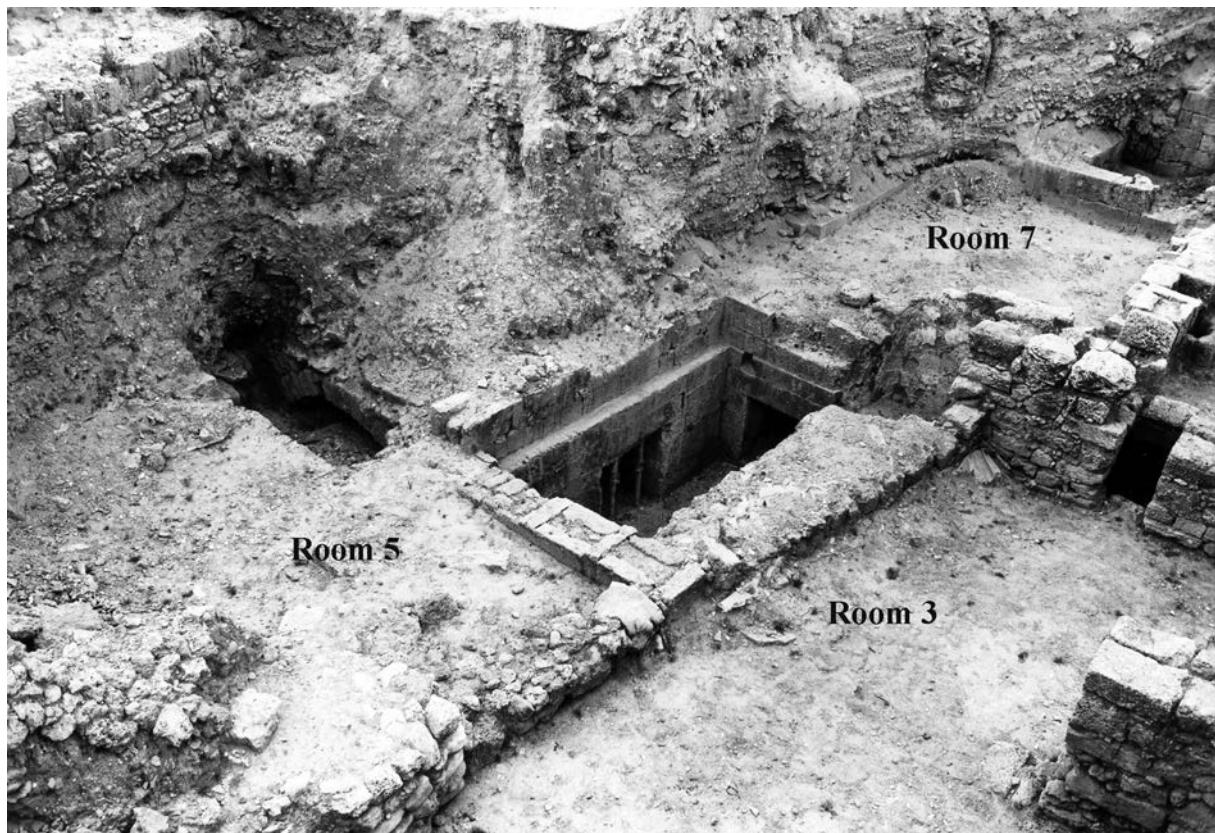


Figure 3.12. Area C, looking west. Kaplan Archive.



Figure 3.13. Ptolemy inscription. Kaplan Archive.

A Hellenistic Stone Inscription from Room 4. Kaplan described the discovery of the Hellenistic stone tablet with a Greek inscription (Figure 3.13) dedicated by the priest Anaxikles to Ptolemy IV Philopator and Queen Berenice during the 1961 excavations (Kaplan 1963c:113). The stone inscription was found among the ground floor courtyard debris, and probably belongs to the nearby Hellenistic Temple (Kaplan 1967:117). Another note, which was found in the storeroom at Jaffa Museum (probably part of the previous Museum display), describes the location of the inscription among the stone collapse next to the “cellar” entrance below the Hasmonean structure: “the inscription was placed in Jaffa after the Battle of Rafiah (217 BCE) when Antiochus III was defeated by Ptolemy...” According to the documentation, the stone inscription was found in Square CC101 (PB 636) at an elevation of 20.85–20.55 m, probably within the so called “Cellar” (Room 4). The stone tablet was first published in 1960 in a daily newspaper (Lifshitz 1960:110).

As part of the work on the Hellenistic and Early Roman Greek inscriptions carried out on behalf of the *Corpus Inscriptionum Iudaeae/Palaestinae* the above inscription was studied by Eran Lupu and published recently (Lupu 2003:193–195). According to Lupu, the inscription was probably engraved on the base of a freestanding stele on which an unknown statue was mounted (Lupu 2003:195). The stone inscription was probably in secondary use within the dwelling. Recently was argued that the stone is too small and therefore it was probably embedded in some kind of larger monument (CII 2014:32, no. 2172), but not necessarily a temple since no evidences for Hellenistic cult was found but an altar dedicated to Ptolemy IV (CII 2014:34, no. 2172).

Stratum 4: Early Roman

The renovated dwelling in Stratum 4 exploited some part of the rooms of the Hellenistic dwelling (squares DD102–103 and CC101–103) with the addition of the newly constructed rooms in squares DD104 and CC104. The Stratum 4 walls were built in the same header-stretcher technique but without having their cores filled with rubble. The floors were elevated to an elevation of 22.63–22.20 m ASL and the wall tops reached an elevation of 24 m ASL. According to the finds, the activity in Stratum 4 is dated to the Early Roman period (1st century BCE – 1st century CE).

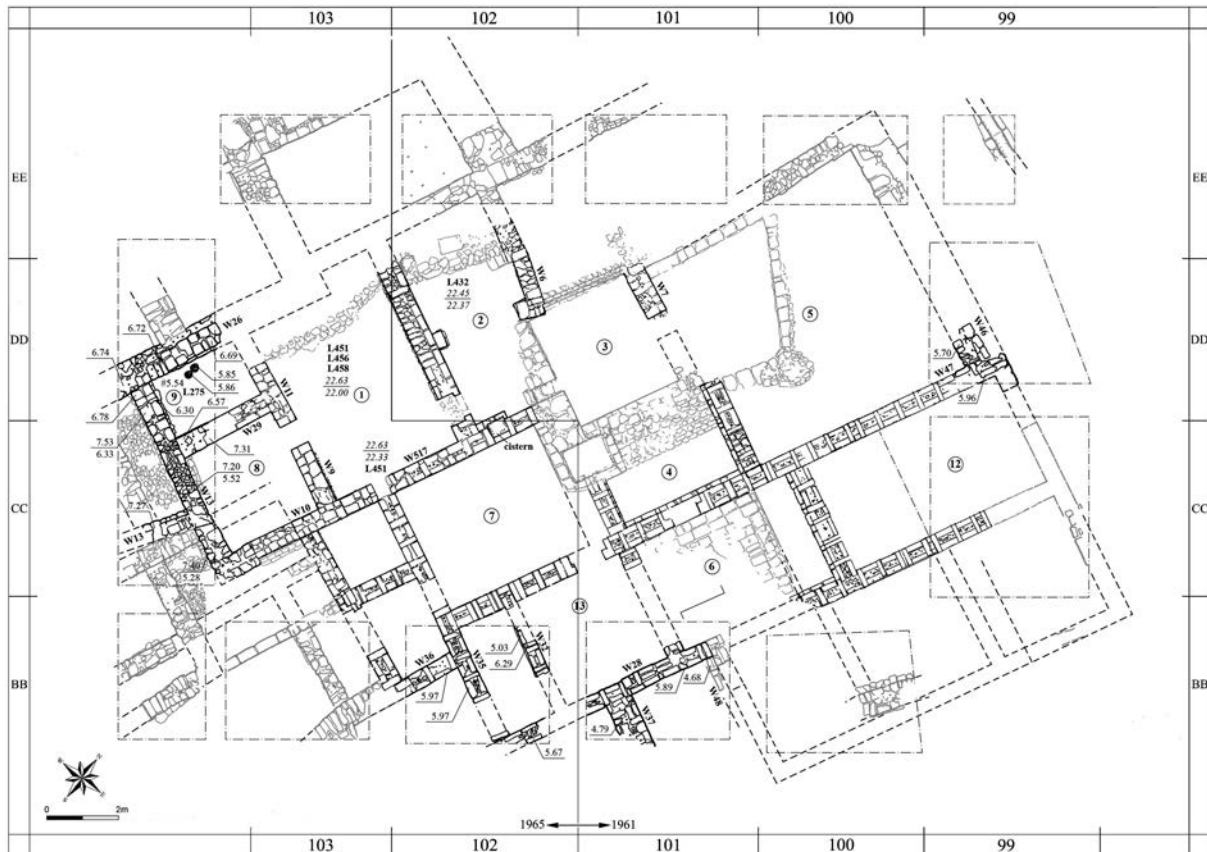


Figure 3.14. Plan Area C, Stratum 4. Courtesy of IAA.

Kaplan identified this occupation phase as part of the 1st century CE dwelling with a courtyard and a cistern leaning against the western wall of the underground Catacomb (Kaplan 1963c:111–112; 1980/1:412). He assumed that the building was destroyed by the Romans during the Great Revolt. On the basis of that conclusion Kaplan published two pottery assemblages dated to the 1st century CE. The first was from the Jaffa dwelling in Area C and the second from Tirat Yehuda. The Jaffa assemblage included pottery from Stratum 6 described by Kaplan as follows: “Many pottery sherds were found within the sixth stratum on the yard floor (our Room 2) and attached cistern ... All the evidence can prove the destruction of the Stratum 6 building without fire ... The destruction occurred in 67 CE by [the soldiers of] Vespasian” (Kaplan 1964a:6).¹⁷

The plan of the house can be described as follows. Some of the previous ground floor rooms were blocked up and left in disuse. The entrance to the house was from the north through Room 2 on the first floor, which formed an open courtyard (L.432). The eastern wall (W.518) of Room 2 was built in the original header-stretcher technique. Kaplan described it as being preserved up to two meters above the floor level with a threshold and two jambs rising to an elevation of one meter each (Kaplan 1963c:111). At the western end of W.517, next to the entrance to Room 1, a pit was found built within that wall (Figure 3.15). Kaplan described it as a built plastered cistern for collecting rain water, which penetrated below the floor level. The finds in the floor level of Room 2 included pottery and stone vessels typical for the Jewish population of the 1st century CE. The finds dated to the last occupation phase in the 1st century CE as suggested by Kaplan (Kaplan 1964a:6) (Figure 3.16:1–10).

¹⁷ Kaplan here referred to the Roman period stratum as Stratum 6 instead of Stratum 4 in accordance with his stratigraphical scheme.



Figure 3.15. Room 2 and Pit 1 next to the entrance to Room 1, looking south. Kaplan Archive.

The following walls can be identified according to the building technique as an Early Roman addition to the Hellenistic house. On the west side is W.6 with the entrance to Room 3. Room 4 nearby probably served during that period as a cellar. Unfortunately, no loci exist that could indicate the date of these rooms. The entrance through W.7 leads from the northern side to Room 5 was originally part of the Hellenistic house and probably continued to be occupied throughout the Early Roman period, even though no evidence or documentation of a post-Hellenistic occupation phase have survived from Kaplan's excavations.

No	Reg. No.	Square	Bucket	Description	Period
1	79/C/61/599	DD102	621	Judean juglet	1 st –2 nd CE
2	C/61/B594.2	DD102	594	Judean juglet	Late 1 st BCE–1 st CE
3	C/61/B621	DD102	621	Judean cup	1 st BCE–1 st CE
4	C/61/B593	DD102	593	Judean bowl	1 st BCE–1 st CE
5	79/C/61/454	DD102	621	Cretan amphora	Late 1 st BCE– late 1 st CE
6	79/C/61/442	DD102	621, 563, 559	Herodian dolium	1 st –2 nd CE
7	79/C/61/369	DD102	592	Herodian lamp	Early Roman
8	79/C/61/324	DD102	592	Herodian lamp	Early Roman
9	C/61/B592	DD102	592	Cast grooved linear-cut deep bowl	late 1 st BCE–mid 1 st CE
10	79/C/61/114		640	Chalk mug	Early Roman
11	79/C/61/148		641	Chalk mug	Early Roman

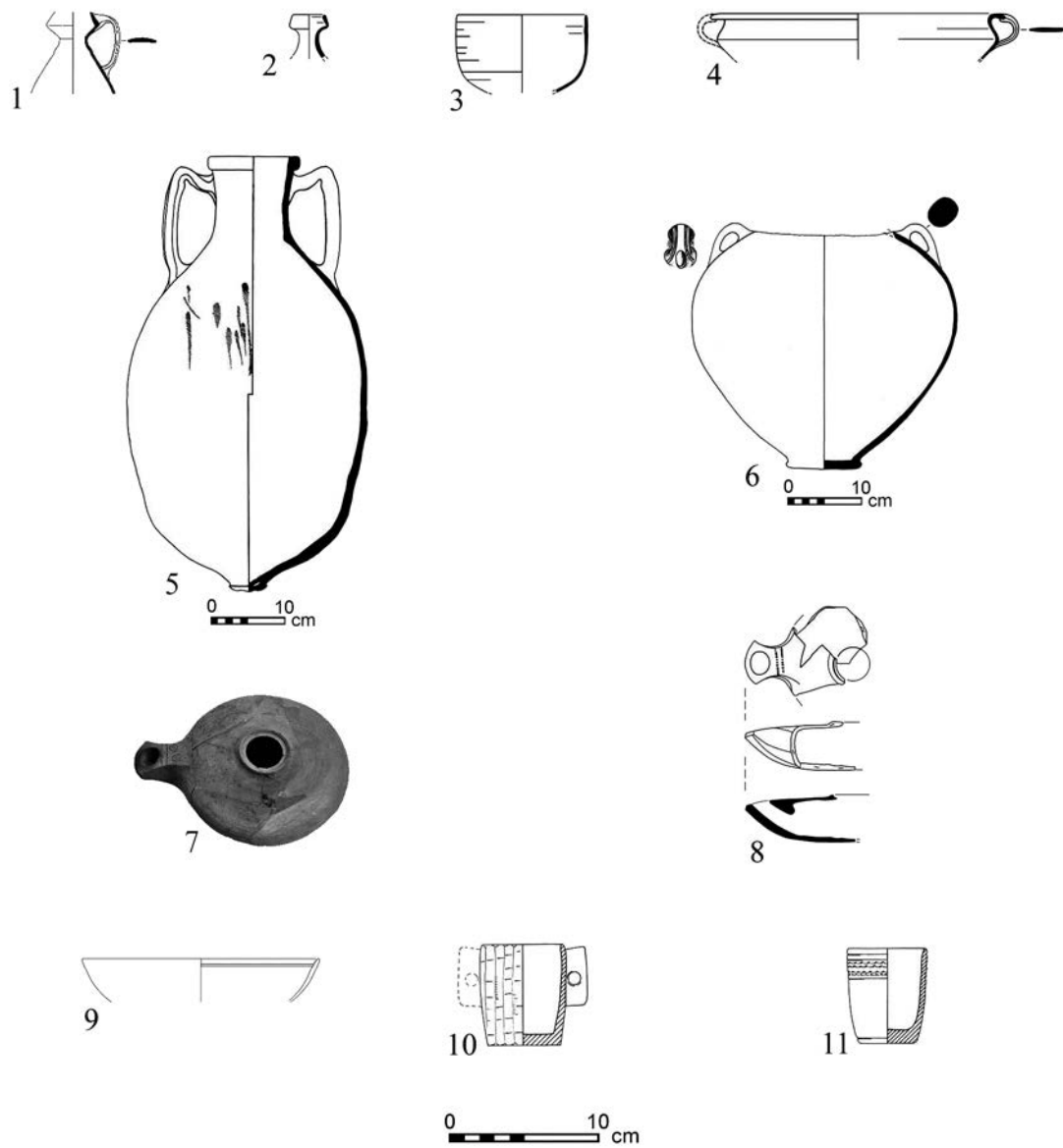


Figure 3.16. Vessels from Room 2 (L.432).



Figure 3.17. Fragments of red stucco (W.517, W.518).



Figure 3.19. Fragments of chalk vessels.



Figure 3.18. Pyramidal bread stone stamp.

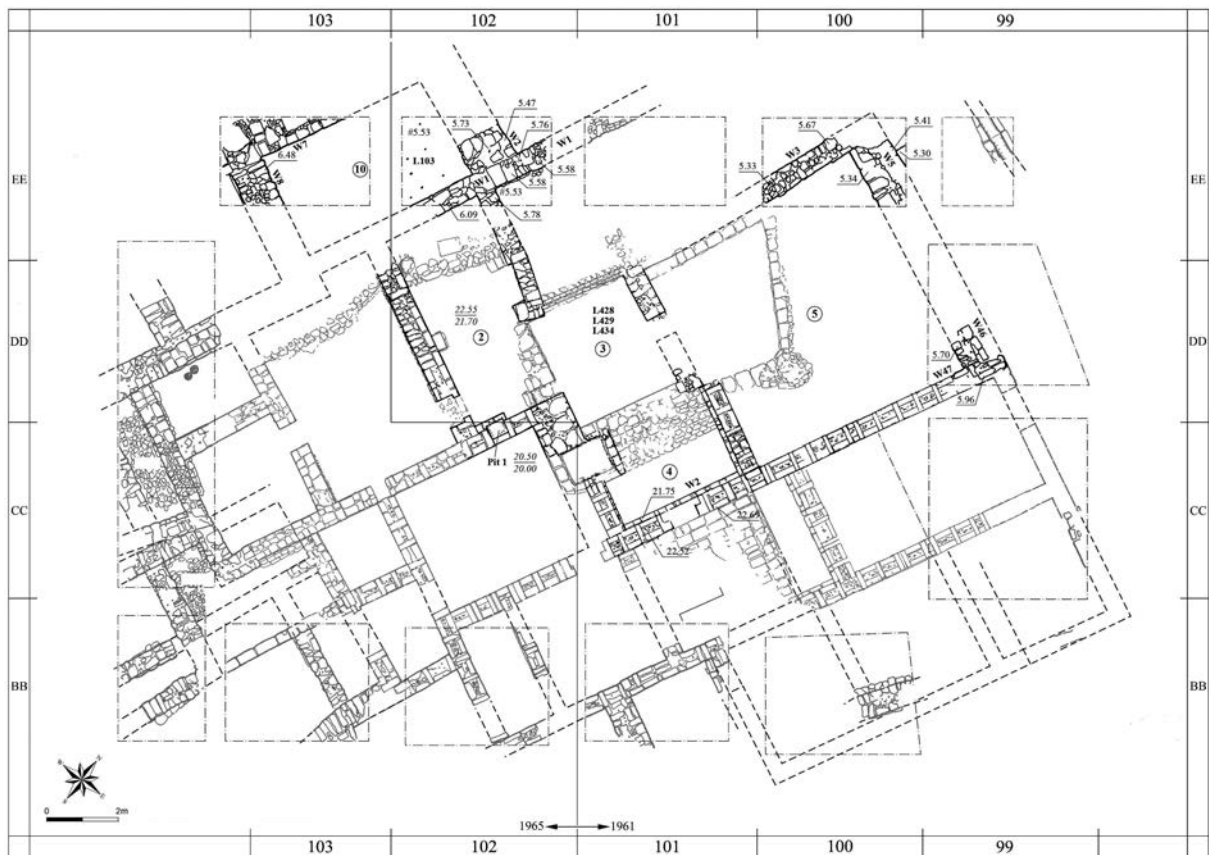


Figure 3.20. Plan Area C, Stratum 3. Courtesy of IAA.

<i>No.</i>	<i>Reg. No.</i>	<i>Square</i>	<i>Locus</i>	<i>Bucket</i>	<i>Description</i>	<i>Period</i>
1	79/C/61/375	DD101	429	671	Stopper	Early Roman
2	79/C/61/453	DD101	428	535	Bag Shaped jar	2 nd –3 rd CE
3	79/C/61/448		428	543	Bell Shaped jar	Early Roman
4	79/C/61/435	DD101	428		Jug	
5	79/C/61/440		428	29	Cilician amphora	Roman

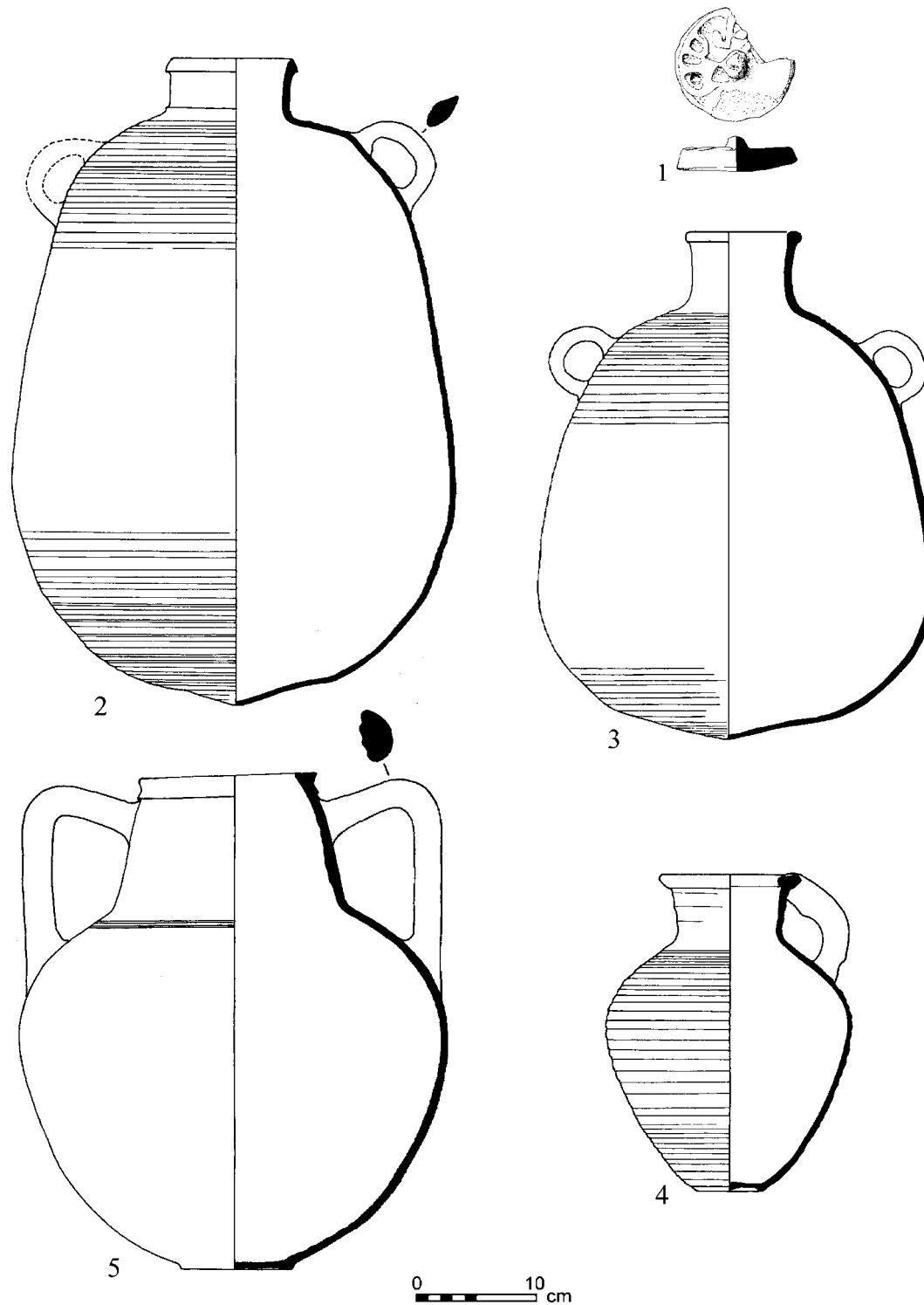


Figure 3.21. Ceramic finds from Room 3.

No.	Reg. No.	Square	Locus	Bucket	Description	Period
1	79/C/61/292	DD101	429	614	Pseudo Imperial lamp	2 nd cent. CE
2	79/C/61/296	DD101	429	614	Pseudo Imperial lamp	2 nd cent. CE
3	79/C/61/294	DD101	429	651	Pseudo Imperial lamp	2 nd cent. CE
4	79/C/61/287		428	526	Tubular bowl base	mid-1 st – 2 nd cent. CE
5	79/C/61/115		428	523	Chalk mug	Early Roman
6	79/C/61/146		428		Chalk bowl	Early Roman
7	79/C/61/166		428	549	Volume measuring device	Early Roman
8	79/C/61/222		428	554	Bell	Roman
9	79/C/61/221		428		Lid	Roman?

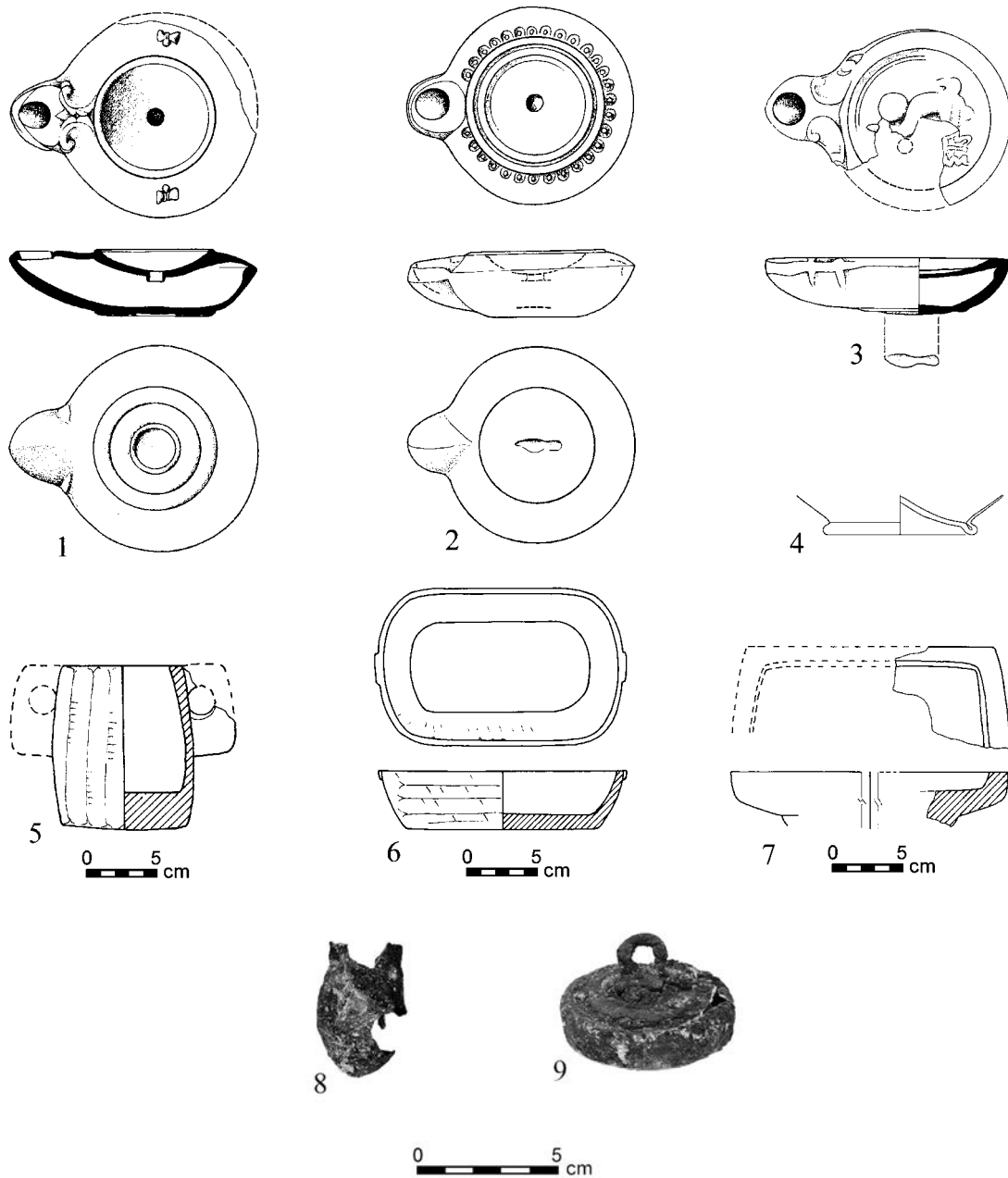


Figure 3.22. Finds from Room 3.

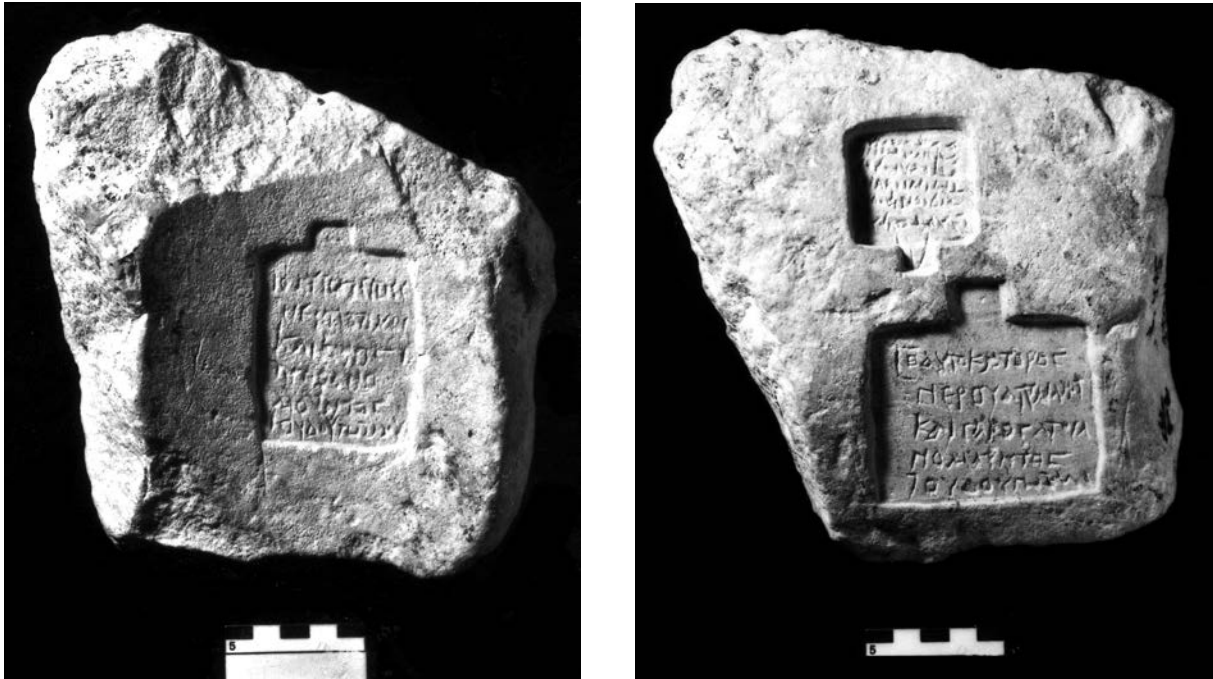


Figure 3.23. Two parts of limestone mold. Kaplan Archive.



Figure 3.24. Illustration of the limestone mold. Kaplan Archive.

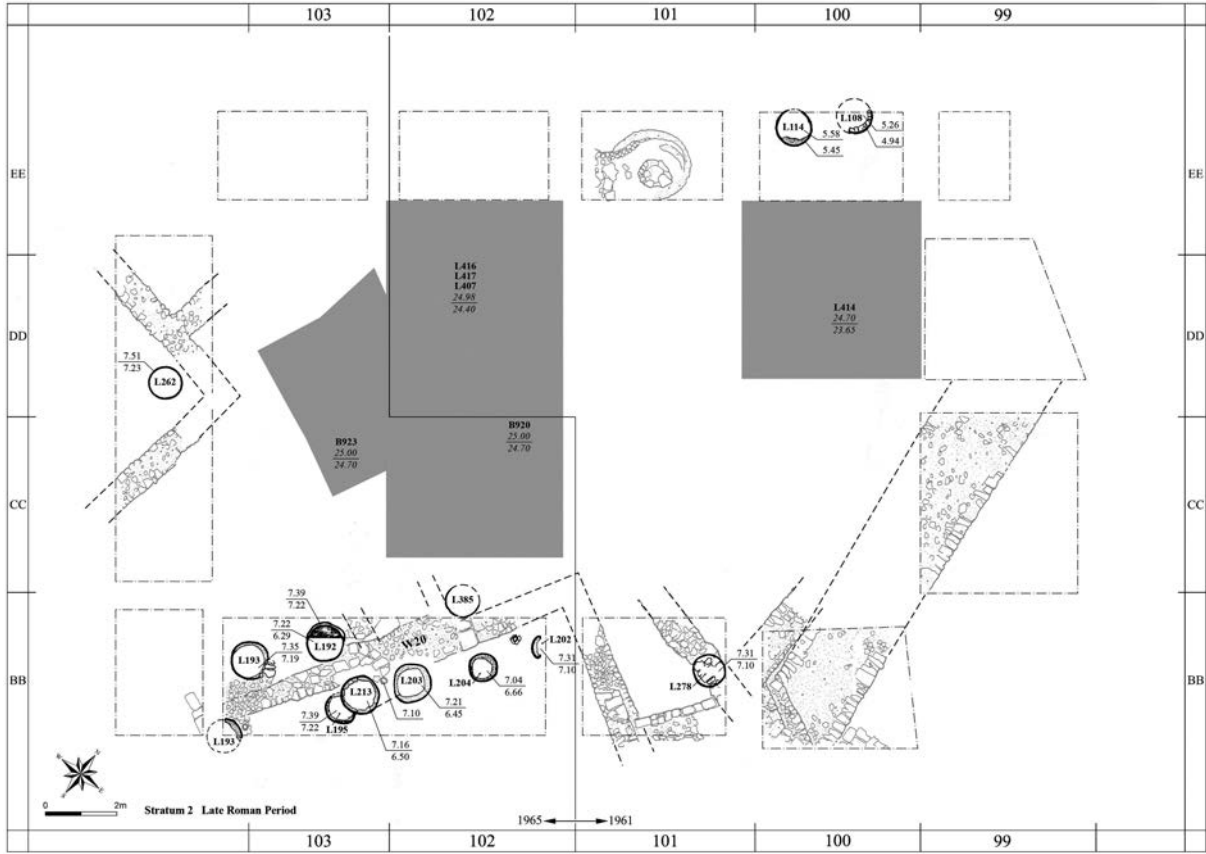


Figure 3.25. Plan Area C, Stratum 2. Courtesy of IAA.

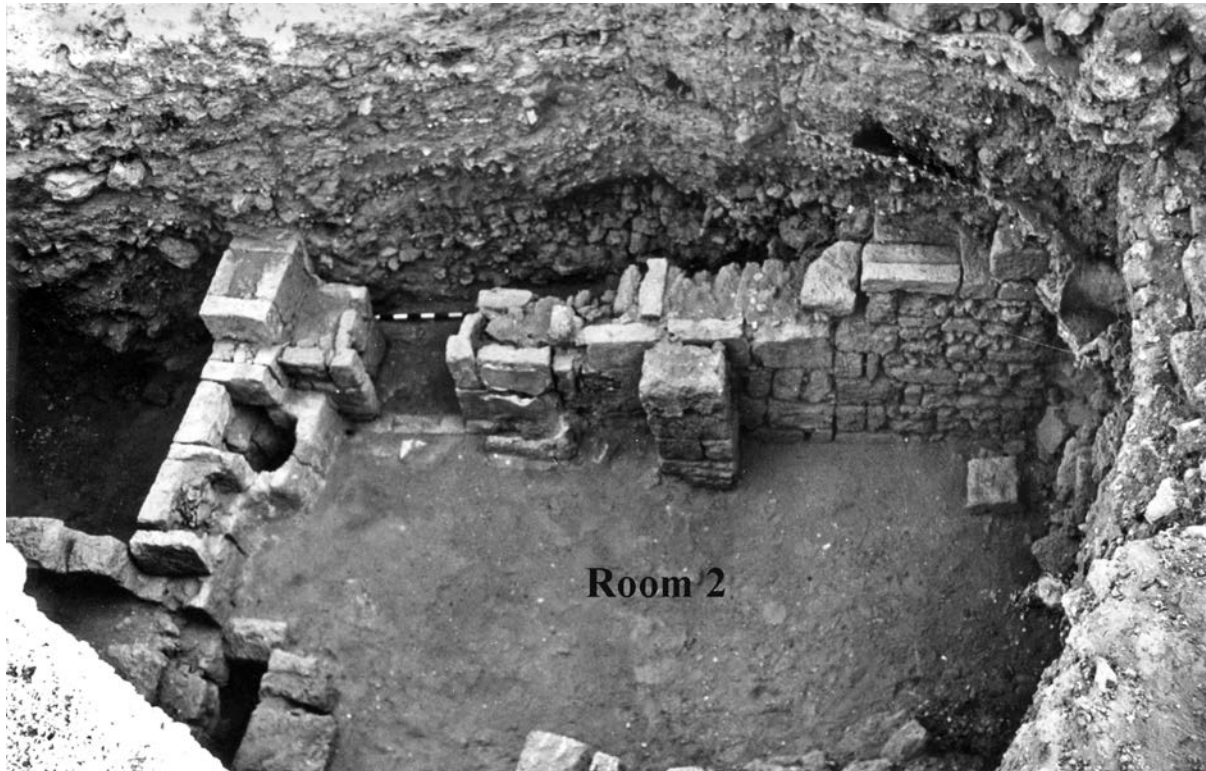


Figure 3.26. Room 2, looking west. Kaplan Archive.

The situation is slightly different in Rooms 1, 8, and 9. The entrance to Room 1 was located in the south end of W.518. The room was enclosed on the south by the Hellenistic W.517 and on the west by the Hellenistic W.518. Both of them were plastered and painted with two layers of white plaster and decorated with reddish and brown patterns (Figure 3.17, Kaplan 1964a:6)¹⁸. Remains of a colorful wall decoration are still visible *in situ* after the reconstruction of Qedumim Square and can be seen on W.517, W.518 and W.9 (Figure 3.3–6). Room 1 was possibly decorated with the masonry style wall painting technique so typical of high class dwellings during the Roman period. W.517 was interrupted near its eastern end by a niche which was identified by Kaplan as a closet. However, it seems that the niche was located at the meeting point or juncture between the Hellenistic W.517 and W.10 (Figure 3.6). W.9 as well as W.10 and W.11 seem to be Early Roman additions since the walls are built in the Stratum 4 technique without a rubble core. The pottery associated with the plastered floor at Square CC103 (Locus 451) is dated to the last occupation phase of the floor, which is the late 1st century CE. The entrance through W.9 leads toward two additional Early Roman rooms (Rooms 8 and 9). The eastern W.13 enclosing both rooms was dated according to Brand's excavations to the 1st century BCE – 1st century CE.

Kaplan mentioned that on the floor and within the cistern many pottery sherds, oil lamps and bronze coins were found dated prior to the year 58/59 CE (Nero Caesar) (Kaplan 1963c:111–112; 1980/1:412). More Roman finds were discovered such as the stamped tile fragment with the Latin inscription 'Tenth Roman Legion *Fretensis*'¹⁹ and a pyramidal bread or cheese stone stamp marked by the Greek word "Ariston" (Figure 3.18) (Kaplan 1962a:10; IIC 2014:146, no. 2262). However the finds which were discovered on the plastered floor can clearly date Stratum 4 to the 1st century CE (L456, L458).

Stratum 3: Mid-Roman

Kaplan defined this stratum as Stratum 5, which was totally destroyed during the reign of Trajan (115–117 CE). However, until its destruction which probably occurred in the late 1st/2nd century CE, part of the Early Roman dwelling continued to function. A few rooms were renovated and new floors were laid down. In Room 3 the floor substructure was exposed at an average height of 22.55–21.70 m ASL. It was described by Kaplan as being made of a "white lime" (Square DD101) (Kaplan 1980/1:412). The pottery associated with the floor included a Judean pottery assemblage as well as Judean chalk vessels of a Jewish nature (Figure 3.1). A very unique stone funnel which was part of table used for measuring volumes was found, as well as large vessels with pipe-like protrusions which served as containers for precious liquids (See Chapter 13, Nos.13.75,13.79). The associated finds were dated to the 1st – 2nd centuries CE (Loci 428, 429, 434) (Figures 3.21–3.23).

Room 4 continued to serve as the cellar of the house. According Kaplan's observations, many traces of burning and an ash layer were found on the cellar floor and walls. In addition, a large assemblage of pottery, stone vessels, a small bronze jug, and a hoard of bronze and silver coins were recovered on floor level according to Kaplan's preliminary publication (Kaplan 1962c:149). However, these coins seem to be lost since they were never found in the Jaffa assemblages. Revealed on the floor was an "outstanding artifact, a thick hard limestone fragment incised on both sides with three square sinks (Figure 3.23). The three sinks, each of a different size, served as molds for casting lead weights and are marked with three versions of the same Greek inscription: "During the days of Trajan in the fourth year to his government [102 CE]... Agoranomos Yehuda [Judah]" (Kaplan 1963c:113; 1980/1:412) (Figure 3.21). Kaplan believed that this evidence dated the destruction of the building to the Trajan period in connection with the Jewish rebellion in North Africa (115–117 CE) against Rome (Kaplan 1962c:149; for additional interpretations and recent conclusions see IIC 2014:139–144, no. 2259).

Room 5 was renovated. During Brand's excavation the two attached walls W.3 and W.5 were exposed on the north and west (EE100). Another room, Room 10, was probably part of the same house complex and was exposed during Brand's excavation (EE102–EE103). On the northwest side the two attached W.7 and W.8 were found, as well as the two attached W.1 and W.2 on the northeast side. A white lime floor (Locus 103)

¹⁸ A few fragments of red wall plaster were found in Area C; none of them had a clear context.

¹⁹ This tile was dated to the 2nd–3rd century CE and associated with Stratum 2.

was attached to the southern part of W.1 and W.2. A stone slab floor was attached to the other side (Locus 104), dated to the late 2nd century CE.

More evidence concerning the Stratum 3 occupation phase was found in another assemblage that Kaplan called Pit 1. Its location within squares CC102–DD102 was never identified. The ceramic assemblage found in Pit 1 and on the floor next to it can be generally dated from the late 1st–late 2nd century CE. The finds associated with Pit 1 were found to have been thrown inside, which was probably turned into a refuse pit, and the tunnel was blocked after the pit had run out of use, probably during the late 2nd/3rd century CE.

Stratum 2: Mid/Late Roman

The original Hellenistic building (Stratum 5) was destroyed during the 3rd century CE. After the destruction of Stratum 3 the rooms were blocked, filled and leveled to the average height of 24.15–24.40 meters (the tops of W.9 and W.5). No architectural evidence for a new structure was documented except Kaplan's evaluation which suggested the existence of a large building dated from the 3rd to the 4th century CE (Kaplan's strata 3–4) (Kaplan 1993:591). Kaplan identified the remains of a big building paved with large sandstone slabs and possessing a thick foundation of rubble masonry (Kaplan 1993:591). The floor of the new structure appeared at an average elevation of between 25.00–24.15 m. ASL and was made of stone slabs. Kaplan wrote in the 1961 bucket list that "new stratum was started at the 24.20–24.00 m level" without mentioning the stratum number or any architectural element.

In Square DD102 several mixed loci appeared "below the Floor" (height 24.40–24.15 m), dated according to the pottery from the late 1st century BCE to the early 2nd century CE. The floor was made of stone slabs that were laid down at an average elevation of 24.40 m ASL. A single stone slab still can be seen on the north end of wall W.518 (elev. 24.47 m) (Figure 3.22). On the floors in squares DD102 and DD103 a layer was found which was described by Kaplan as a "burning layer" (L416) or a "black ash layer" (Locus 439 PB 897) (average elevation 24.55–24.72 meters). Both were dated according to the pottery to the 1st–2nd century CE. In connection with squares DD102 (Locus 417), CC102 (PB 920) and CC103 (PB 923), Kaplan described the "removed/missing stone pavement." The associated pottery was dated from the 2nd–4th centuries CE. The stone pavement which had been removed reached an elevation of 25 m.

The ash layer mentioned above could have been associated with the function of the area. Brand's excavation exposed evidence that can connect the function of the new area to some kind of insignificant industrial zone. Many kilns, which were dug down into the early strata, were exposed in the south strip (on both sides of W.20: L.92–195, 202–204, 213, 278, 385; and few others in the north and east strip, L.108, 114 and 262; Figure 3.25). The kilns were sunken within an earth filling. Joined amphora necks in secondary use served as ventilation pipes. The kilns were dated until the 3rd century CE (Brand 1994:plate 75; Brand [unpublished]:8).

In Square DD100 a homogenous pottery assemblage was discovered without any architectural or stratigraphical context (Locus 414). An additional unique artifact uncovered is a Tenth Roman Legion Fretensis roof tile dated to the 3rd century CE. The assemblage appeared at an elevation of 23.65–24.70 m ASL. The pottery included many common cooking vessels typical of the 2nd–4th centuries CE, made of a unique type of fabric. The pottery types could have been manufactured in Jaffa during the 4th centuries CE.

Stratum 1: Byzantine

The structure at Stratum 1 was characterized by plain mosaic floors (elev. 25.25/25.60–26.07 m).²⁰ Segmental mosaic floors appeared in squares CC102, CC103, and DD103. Many of these mosaic fragments were found in Jaffa storage rooms. One fragment is on display in the Jaffa Museum (Kaplan 1956a:195; Ovadiah and Ovadiah 1987:no.106). The mosaic floors were made of white plain tesserae, typical of the floors in Byzantine industrial installations. They can be dated according to the associated pottery to the Late Byzantine period. The level of the mosaic floor can be assumed, according to Kaplan's photographs, as 1 m above the Roman floor (Figure 3.23).

²⁰ Above the mosaic floor appeared a "whitish layer" (PBs 899, 907–911), which is probably associated with Kaplan's Stratum 2. The whitish layer was exposed in Square CC103 with average elevations between 25.25 and 25.60.

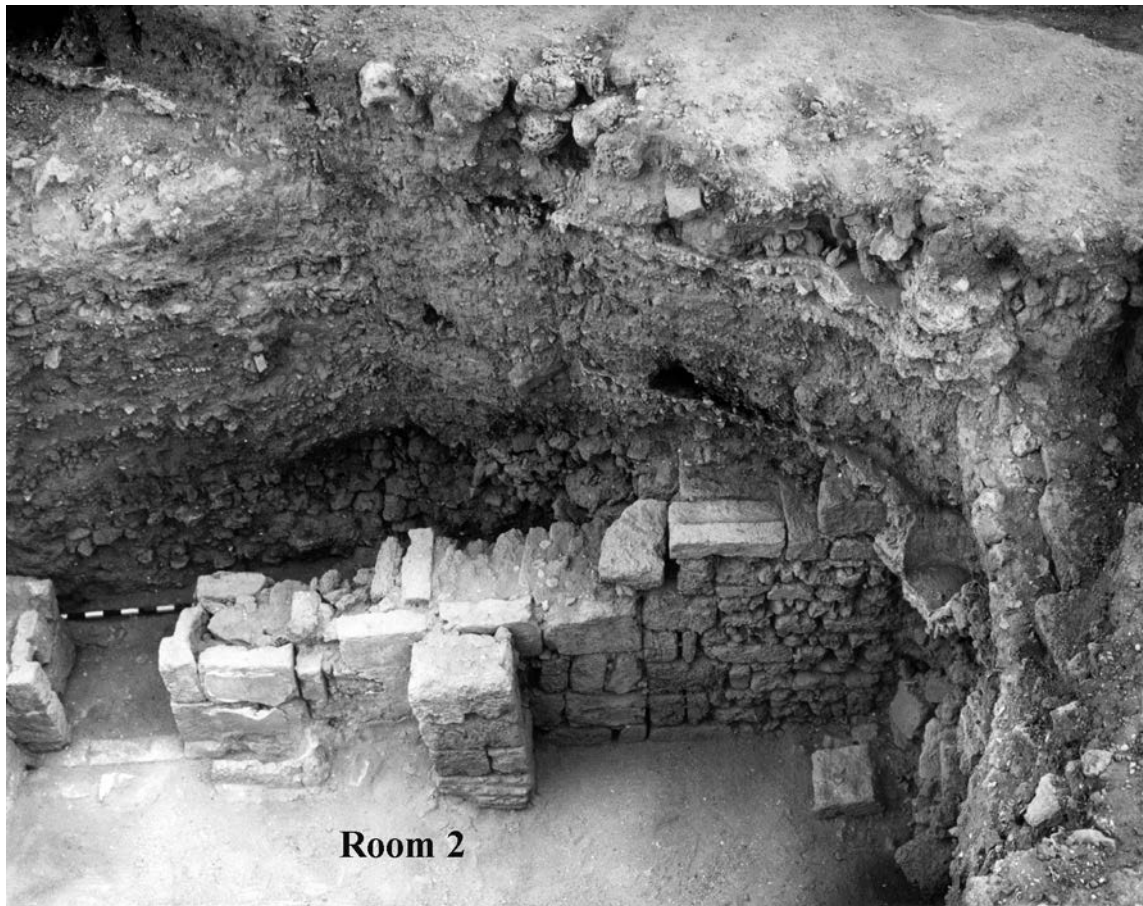


Figure 3.27. Room 2 with the entrance to Room 1 (before 1965 excavations). Kaplan Archive.

Conclusions

Kaplan related the building in Area C to two major historical events. The first was the Great Jewish Revolt in 66–70 CE and the second was the Jewish Revolt in the diaspora during the Trajan period (115–117 CE). However, the archaeological remains clearly show that the building in Area C was erected already during the Late Persian/Hellenistic period and continued to function until the 2nd/3rd century CE. During this period of time several stages of destruction and reoccupation took place.

Stratum 6: Persian

Human activity took place in the area during the Late Persian period, or earlier. Remains of the few exposed walls may represent the original building and point to the fact that the Hellenistic dwelling was built on top of a Persian structure (Burke and Peilstöcker 2009:224; also Burke et al 2014:42–45).

Stratum 5: Hellenistic Upper Class Dwelling

The house was built in the typical header-stretcher style characteristic of buildings in Hellenistic sites in the coastal plain until the 2nd–1st century BCE. The header-stretcher masonry style originated from the Greek monolithic dry architecture and usually used huge stretcher stones placed next to each other (Sharon 1987:33). Many scholars believe this constructional revolution was spread by Phoenicians who integrated this technique within their private and public architecture (Sharon 1987:39; Stern 1977:17–27; 1978:71–75; Van Beek and Van Beek 1981:70). The header technique was very useful when working with the rather fragile *kurkar* stone and was used as a means for strengthening the building or fortification walls. The header-stretcher technique is represented in our region as early as the 10th century BCE at Megiddo (Yadin 1970:pl. 9), Samaria (Reisner and Fischer 1924:fig. 26, 38), Tel Dan (Biran 1982:fig. 4, 12), Beth Shean (Rowe

1940:fig. 2) and was considered as a local technique (Shilon 1979:114). However, the Phoenicians exported their building expertise throughout the coast of Eretz Israel during the Persian and Hellenistic periods. With the Phoenician expansion, this architecture spread as far as Ras Shamra in Lebanon, Akko, Tel Abu Hawam, Dor, Tel Mevorakh, and Jaffa (Elayi 1996:fig. 4). In addition, the technique appeared on a small scale in Samaria (Reisner and Fisher 1924:fig. 53, 57) and Oum el-‘Amed (Dunand and Duru 1962:pls. 8,44). Phoenician ashlar construction was partly replaced in Eretz Israel by the “Hasmonean Style” during the 2nd/1st century BCE (Sharon 1987:39). The architecture of the dwelling in Area C seems similar to Dor’s Persian building next to the Area B gate and to the Phoenician house at Area C (East façade, Insula C0, W.504) (Sharon 1987:24, fig. 2a; Stern 1995:92–94). Both were assigned to Strata 3–4 and dated to 350–125 BCE (Stern 1995:photo 5.50, plans 5.15–5.16). The building was erected according to the architectural style and associated finds during the early Hellenistic period. It was built as a two-story dwelling, probably for a high class Phoenician family connected to the local trade in Jaffa’s harbor.

Stratum 4: Early Roman (1st cent. BCE–1st cent. CE) Jewish Dwelling

The Hellenistic building was partly destroyed and renovated during the late 1st century BCE/1st century CE. Following that renovation, the ground floor was no longer used. The first story was renovated, exploiting the Hellenistic header-stretcher technique for walls and new rooms with rubble-core walls in the southern and western parts of the house. The renovated house follows the Early Roman traditional style and was decorated in the same masonry style. The dwellers were probably members of a Jewish family that occupied the house until its destruction during the late 1st century CE. Kaplan suggested that the house was destroyed by Vespasian’s army. Josephus mentioned the episode in which Vespasian destroyed Jaffa port in 67 CE (*J. BJ* 3.27–419). Two years earlier Cestius Gallus came from Acco/Ptolemais and attacked Jaffa from the land and from the sea (*J. BJ* 2 18 10). The historical evidence supports and proves the destruction in Jaffa as well as the two Early Roman catapult balls (L.432) which were found on the floor (Figure 3.28).

Stratum 3: Mid-Roman (1st–2nd cent. CE) Upper Class Jewish Dwelling

The dwelling was renovated after Vespasian’s destruction and was occupied by an upper class Jewish family, probably Yehuda, the *agoranomos* during the 1st century CE. Yehuda the *agoranomos* was most likely a Hellenized Jew belonging to one of the aristocratic Jewish families. The finds in Area C express the duality in Jaffa: on the one hand, some Jews insisted to maintain their own traditions through observance of pure ritual standards in their households, while on the other hand, they desired to retain their control over the port and the market through the high Jewish official, Yehuda the *agoranomos*. He was permitted by the Roman government in the 2nd century CE to continue practicing the Jewish traditional life style in Jaffa (Tsuf 2011). The appearance of the unique stone devices for pouring precious liquids in relation to the possession by the *agoranomos* of Jaffa of stone molds for casting lead weights seems more than accidental. It proved that the magistrates were responsible for overseeing the activities of the local marketplace (for further discussion, see Chapter 14, pp. 546).

Kaplan associated the *agoranomos* inscription, which was found within Stratum 3, to the Trajan period. During that time was carried on the Jewish revolt in North Africa against the Roman regime. Although the inscription can point to the occupation of the building during the early 2nd century CE, it cannot be a direct proof of the destruction phase following a revolt during Trajan’s time. The inscription is evidence for the existence of a Jewish *agoranomos* in Jaffa who held his post under Nerva or Trajan as the superintendent of weights and measurements in the market of Jaffa.



Figure 3.28. Catapult balls from Area C.

An additional argument was that during the early 2nd century CE the building was destroyed following the “Kitos War” (115–118 CE). Kaplan associated the layer of ash in the cellar (Room 4) to that conflict (Kaplan 1980/1:412, note 4). The Kitos War was considered by scholars as the last stage before the Bar Kochba Revolt (Kaplan 1980/1:412; Smallwood 1978:161–171). However, in this stage of incomplete excavation we cannot connect the destruction of the building to the above event in light of the finds and in accordance with the lack of clear architectural and stratigraphic data.

The status of Jaffa as a *polis* in that time is unclear. Two bronze coins dated to the early 3rd century during the Antonine period can be an argument for that possibility. However, Jaffa might have received *polis* status during the Domitian period or as early as the Vespasian regime (Kaplan 1980/1:415; Ecker 2010:166). Kaplan suggested that official legal and governmental authorization by a Jewish superintendent at the *polis* reflects the high position of the Jews who were the majority in Jaffa. The government body of Jaffa consisted either of gentiles and Hellenized Jews or both Greek and Jewish *politeuma* with Judah acting on behalf of the later (Applebaum 1985/88, 138–44). According to the recent discovery of two weights from Teberais bearing a name of Jewish *agoranomos* it seems that the governing elite of Jaffa and Tiberias in the period following the First Jewish Revolt was composed of people of various ethnic backgrounds (ICC 2014:144, no. 2259).

In light of the inscription and the intimate and close connection with the Jewish community at Alexandria and other cities in Egypt and North Africa (in accordance with tomb inscriptions from the Jaffa cemetery) Kaplan concluded that on the eve of “Kitos War,” during the year 102 CE the Jews in Jaffa lived in a calm and quiet atmosphere. As soon as the Jewish revolt began in the Diaspora, the Jewish inhabitants of Jaffa joined the North African rebels. The destruction of Stratum 3 was a reflection of the new period of resistance against Roman rule (Kaplan 1980/1:415). These conclusions support other historical events, for example, the appointment of Pompeius Falco as the Judean governor during the years 106/105CE. A few scholars interpreted the event as a reaction to unrest in the region before and after the establishment of *Provincia Arabia* (Applebaum 1969:17; Mor 1991:46).

Stratum 2: Late Roman (2nd to early 4th cent. CE) Industrial Area

The lack of significant architectural plans and stratigraphic documentation of the excavated finds does not permit further precise dating of the occupation stages and destruction of the dwelling. However, during the early 3rd century CE the building was no longer in use. A new structure paved with a stone floor was built over the ruins of the dwelling house, after the area was leveled. Simultaneously, several kilns were installed in the area.

It is difficult to tell when the area turned into an industrial complex since the excavation did not reach the floor level (Brand [np:8]). According to Brand's excavation, the kilns were erected between the end of the 2nd century CE and some unknown period. However, I do not have any evidence for the functional change of the area according to Kaplan excavations (1961, 1965), except the numerous amount of cooking vessels particularly characteristic of L.414. This pottery could have been manufactured in the kilns found in the complex or were part of the household in Stratum 2. In addition, the appearance of a single Roman roof tile associated with the Roman Tenth Legion may indicate its presence in Jaffa during the 3rd century CE.

Stratum 1: Byzantine Undetermined Structure

The nature of the remains of this stratum is not clear. However, the mosaic floor can be dated to the late Byzantine period according to the pottery recovered from the "floor removal."²¹ A note which appeared on PB 907 to 911 tags written by Kaplan revealed that "the post Roman pottery was discarded."

²¹ A tabun was distinguished during the 1965 excavation (L.453) but was discarded without leaving further information.

Chapter 4. Area Y: The Agora of Jaffa and Other Remains

Orit Tsuf

The following chapter is dedicated to the study of the 1964 and 1968 excavations in Area Y (plan 4.1). The 1964 excavation was the only season with surviving records, while from the 1968 excavations only the general plan of the excavated area and pottery buckets records were available.

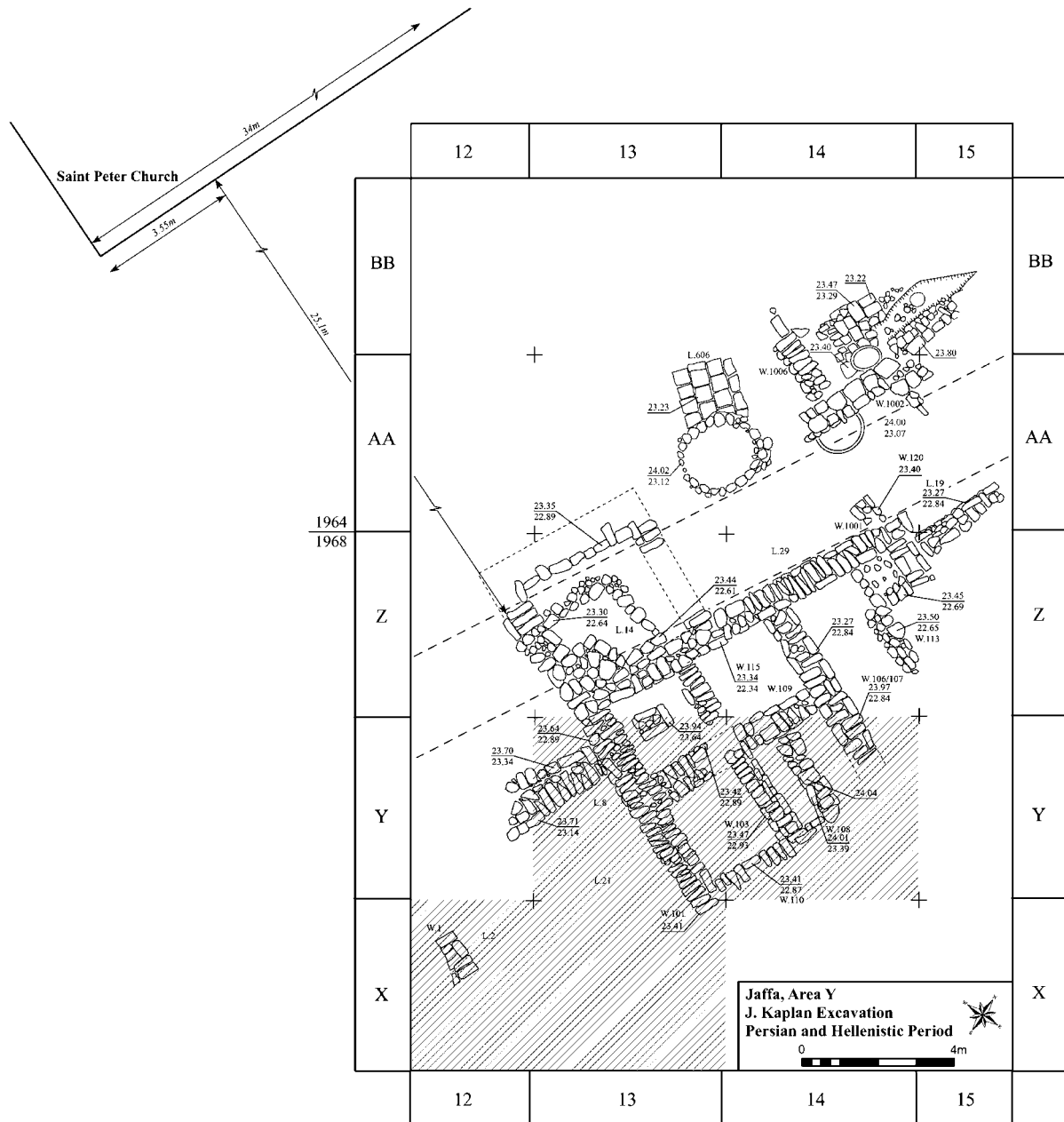


Figure 4.1. Area Y remains from 1964 and 1968.

Area Y was located on the north-west slope of the tell, next to St. Peter's Church (Figures 1.1, 4.1–2). The only evidence left are the notebooks concerning the June–September 1964 excavations. The excavations in Area Y were conducted during three separate seasons: 1962, 1964, and 1968 within the same area (Kaplan 1963a:10; 1964b:286; 1965; 1968; 1969). Although the location of the three excavations within Area Y is not entirely clear, the possible location is suggested in figure 4.1.



Figure 4.2. General view of Area Y in 1968, looking southeast. Kaplan Archive.

The 1962 Season

During July 1962 excavation work began in Area Y adjacent to Sounding X (see Chapter 2; Kaplan 1962b:10–12). It was probably a salvage excavation following the laying down of a new drainage pipe. Due to that fact the excavation was carried out next to the water pipe near the surface, the pottery assemblage lacked any information concerning stratigraphic contexts or registration records (except pottery bucket numbers). However, the pottery was dated from the Early Persian to Early Hellenistic period (Fig. 4.2:1–6).

The Agora, 1964–1968 Seasons

The excavations in the 1964 and 1968 seasons revealed Persian to Early Roman occupation phases. Excavation work in 1964 was carried out in eight squares (3 x 3 m each) in two separate groups: Squares 1–4 (first area); Squares 5–8 (second area). The excavations began at the elevation of 25.05 m ASL and reached bedrock (elevation 23 m) (AA13–AA15 and BB13–BB15) (Figure 4.1). During 1968 the excavation was continued (Figure 4.4). Six squares were laid down (3 x 3 m each) next to the 1964 excavations (Squares X12–X15; Y12–Y15; Z12–Z15). They were located next to the St. Peter church entrance door (1964) and below the public bathrooms next to the modern road (1968) (figs. 4.5–4.6).

Kaplan noted in the preliminary report that “remains of a public building built with ashlar standing on their narrow side (header technique) were discovered at Area Y... the structure contains square, adjacent rooms, similar to typical Hellenistic Agora rooms.”

The exposed building was identified by Kaplan as Jaffa’s Hellenistic Agora (Kaplan 1968:9; 1969:8). We may therefore assume that this Agora can be dated to the 4th century BCE and continued to function despite renovations during the Roman period (Kaplan 1968:9). Kaplan mentioned MB II tombs as well (Kaplan 1968:10).

No.	Reg. No.	Bucket	Vessel	Date
1	79/Y/62/011	4	Red Figured ware	mid 5 th -4 th BCE
2	79/C/62/022	27	Attic kylix	mid 5 th -4 th BCE
3	79/Y/62/034	2-3	Attic lamp	3 rd -2 nd BCE
4	79/Y/62/013	24	Levantine mortarium	late 6 th -2 nd BCE
5	769/Y/62/036	11	Samian amphora	Early Hellenistic
6	79/Y/62/025	12	Pinched lamp	mid 6 th -5 th BCE

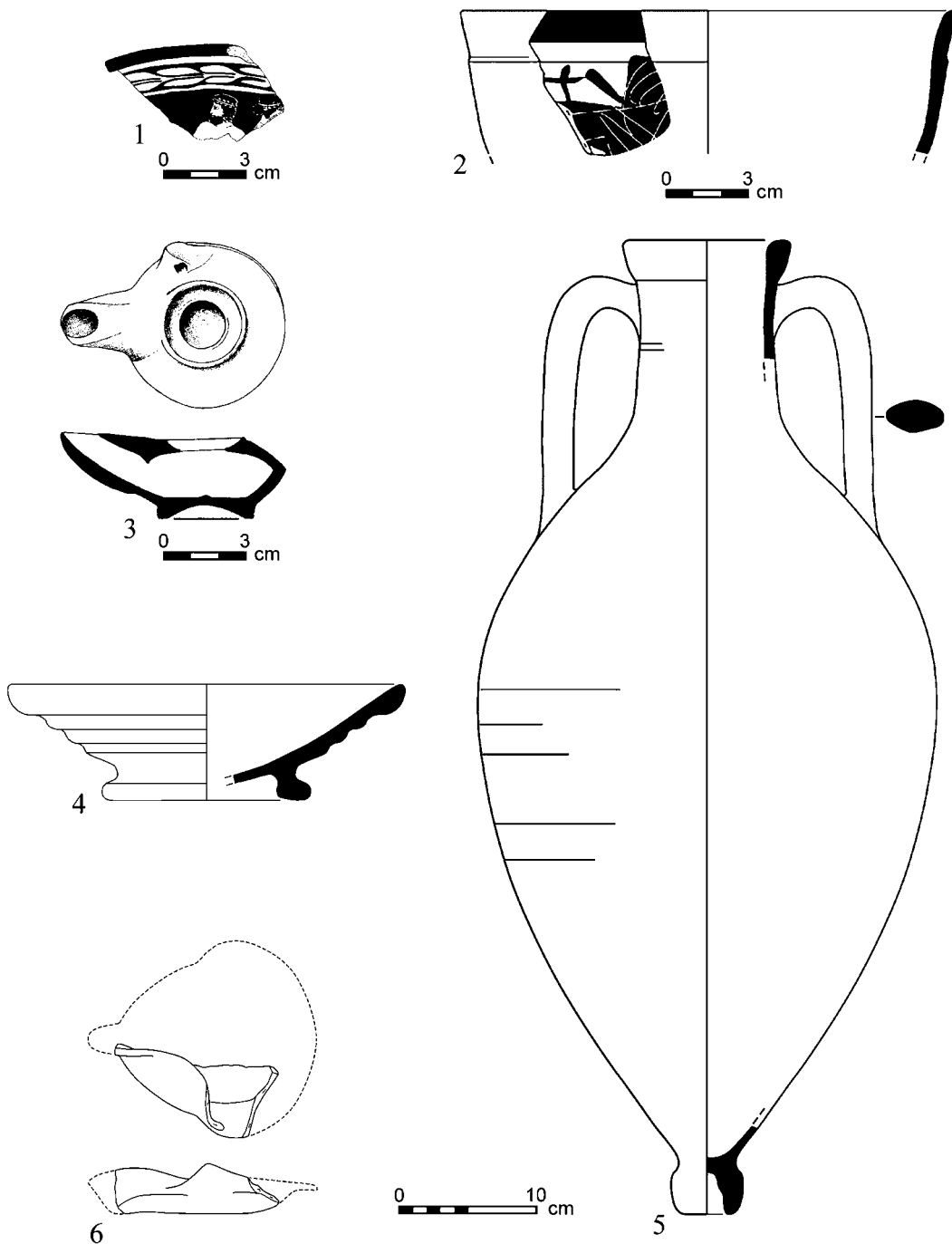


Figure 4.3. Characteristic vessels from Area Y in 1962.



Figure 4.4. General view of Area Y, looking south. Kaplan Archive.



Figure 4.5. General view of Area Y, looking southwest. Kaplan Archive.



Figure 4.6. General view of Area Y, looking south. Kaplan Archive.



Figure 4.7. General view of Area Y, looking north. Kaplan Archive.

The Agora was an impressive structure of monumental ashlar walls (figs. 4.6). The orientation of the building was north-south and the walls reached 24.01 m. Several walls were built in the header technique

(W.101, W.110) while the rest were built in the header-stretcher technique (W.106/107, W.103, W.109) (plan 4.1; fig. 4.6). Both techniques were typical of monumental Persian and Hellenistic structures. The pottery and other small finds date the building from the Persian period to the 1st century CE.

The Persian Pit

The Persian Pit was exposed in Squares X12, Y13 and Y13–14 (Figure 4.1). The definition “Persian Pit” appeared solely on the bucket tags. Since no illustrations were left, the character of the definition “Persian Pit” cannot be revealed. Was it a sounding, a refuse pit, or a segment of the Persian stratum?

The pottery assemblages that were exposed in the associated loci (L.1, L.3, L.13, L.21, L.31) are characterized by an enormous quantity of imported wares dating from the mid to late 6th until the 3rd early 2nd centuries BCE. The homogenous nature of the finds was sufficient reason for further examination of the pit assemblage. Even though the written documentation was minimal and prevents understanding the contexts and association of the finds with their original findspots, the pottery from the Persian Pit is very impressive (fig. 4.8). The wealth of imported wares of the Persian period suggest the existence of a Persian stratum below the Hellenistic Agora, and more importantly, the identification of the area as the public center of ancient Jaffa in these periods.

The Red Brick Floor

A floor was exposed at the elevation of 23.30–23.25 m ASL over two waterspouts (Figure 4.9). The floor was made of irregular squared red bricks above a kurkar level (Locus 606). The floor was adjacent but not attached to W.1002 which was oriented north-south and to W.1006, oriented east-west. A fireplace was exposed on the floor, attached to W.1002. W.1006 was cut into by an “Arabic Intrusion” (Locus 602). The pottery found on the floor (L.606) was dated to the late Persian–Early Hellenistic periods (Figure 4.10:1–8).

No.	Reg. No.	Square	Locus	Bucket	Description	Period
1	79/Y/68/280	X12	3	147	East Greek Banded bowl	late 6 th BCE
2	79/Y/68/313	X12	3	145	East Greek Banded bowl	mid 5 th –4 th BCE
3	79/Y/68/292	Y13	21	47	East Greek Flared rim plate	Persian
4	79/Y/68/309	X12	3	149	East Greek jar	late 4 th BCE
5	79/Y/68/297	X12	1	132	East Greek Table amphora	Persian
6	79/Y/68/285	X12	1	133	East Greek lekythos	mid 5 th BCE
7	79/Y/68/273	X12	1	120	Attic Black Figured krater	late 6 th BCE
8	79/Y/68/288	X12	1	134	Attic Red Figured krater	mid 5 th BCE
9	79/Y/68/295	X12	1	18	Attic Black Figured Boetian bowl	5 th –4 th BCE
10	79/Y/68/289	X12	3	144	Attic Black Figured St. Valentine cup	mid-late 5 th BCE
11	79/Y/68/312	X12	1	124	Black Glazed bowl	4 th –3 rd BCE
12	79/Y/68/269	X12	1	11	Black Glazed <i>kantharos</i>	4 th BCE
13	79/Y/68/275	X12	1	111	West Slope <i>skyphos</i>	mid 2 nd BCE
14	79/Y/68/306	Y13	21	153	Southeastern Aegean amphora	mid 4 th BCE
15	79/Y/68/305	X12	1	11	Southeastern Aegean amphora	mid 4 th BCE
16	79/Y/68/317	X12	1	11	Attic lamp	4 th –early 3 rd BCE

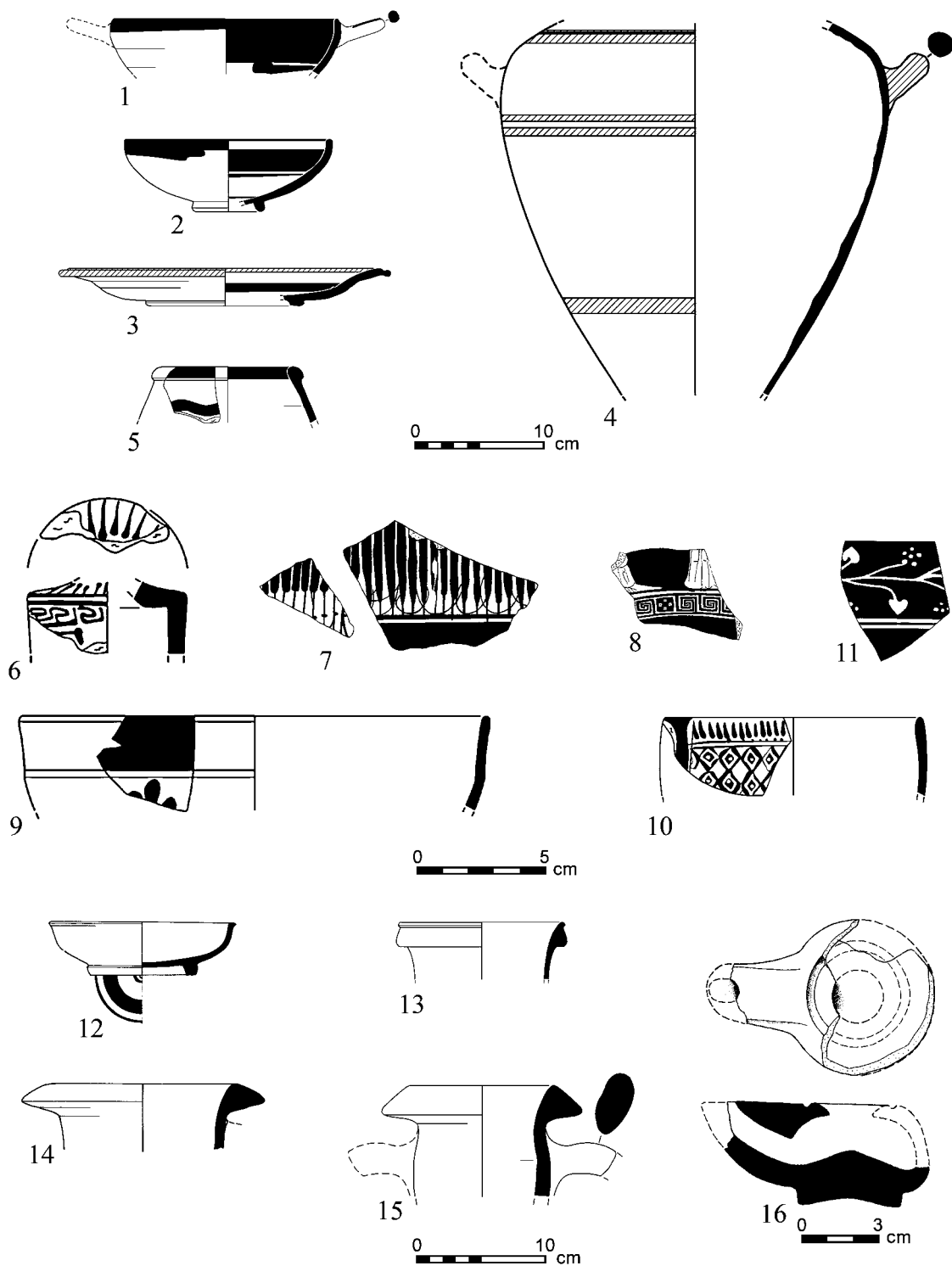


Figure 4.8. Selected pottery from the 1968 season.

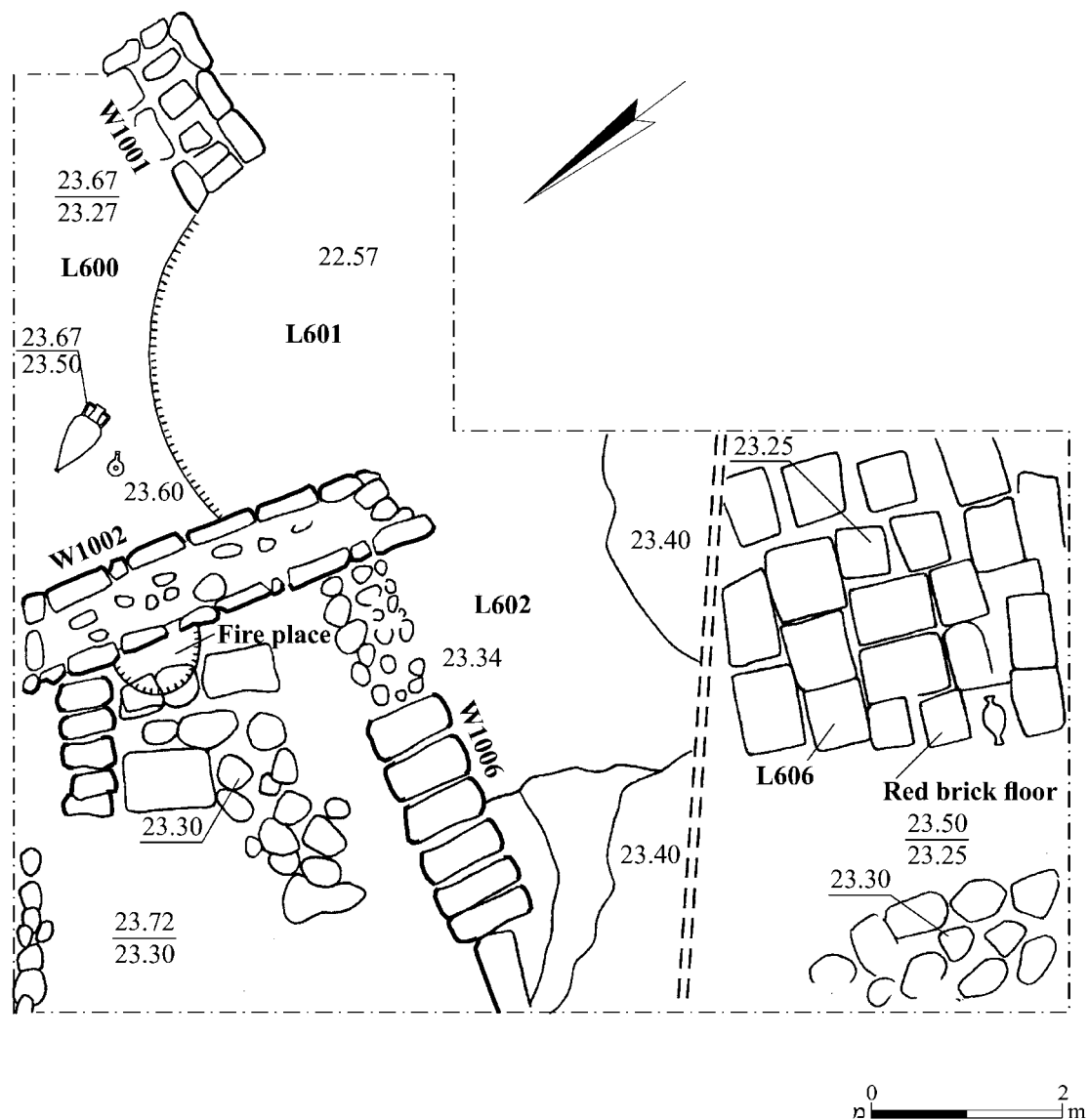


Figure 4.9. The Red Brick Floor (L.606). Courtesy of IAA.

The Plastered Floor

A floor made of white plaster 4–5 mm thick at 23.92 m ASL was exposed. The floor (Locus 600) was attached on the east to W.1002 in Square 2 (Figure 4.11).

Several small finds appearing in Kaplan's plans were identified during this research. The pottery exposed below the floor is dated to the 4th century BCE (Figure 4.12:1–2)²². Above the plastered floor a metal dolphin appliqué was found (Figure 4.12:5) and two complete late Hellenistic lamps (Figure 4.12:3–4). Additionally, a 1st century CE basalt spindle whorl (Figure 4.11) dated the floor until the 1st century CE.

The Stone Pavement

In Square 5, at the height 25.04 m ASL, a segment of a stone pavement was exposed. Kaplan reported the unearthing of “two jugs” east of this pavement at a height of 24.90–24.50 m ASL (PBs 73–75). These jugs were never found in the Jaffa Museum storage rooms. According to the drawing, the jugs resembled storage jars or *dolia* (90–100 cm in diameter), which were buried below a floor. The pottery relating to the two jugs

²² Another complete Cypriot Amphora (79/Y/64/115) was recovered in Area Y in 1964, but unfortunately without a clear context.

is dated to 1st to 2nd centuries CE. One can conclude that the jugs were part of an installation associated with same kind of liquids production. The *dolia* functioned as containers for the collection of liquids. According to the pottery dating, the whole complex was in operation during the Early Roman period. Kaplan reported that “below the floor” there was a layer of pottery sherds 50 cm thick (PBs 65, 68, 72) (25.04–24.50 m ASL). The historical context of each bucket related to the stone pavement or the two *dolia* installations was not recorded in Kaplan's notebooks. If we accept the basic assumption that the 50 cm layer of pottery below the floor is related to the stone pavement, the date of the floor should be mid-Roman (1st/2nd century CE). The two buried *dolia* or jars may be associated with the activity during that period.

No.	Reg. No.	Square	Locus	Bucket	Description	Period
1	79/Y/64/123	4	606	51	Local Red Slip bowl	Hellenistic
2	79/Y/64/122	4	606	51	Local Red Slip bowl	Hellenistic
3	79/Y/64/120	4		10	Local Red Slip bowl	Hellenistic
4	79/Y/64/076	4	606	43	Fluted Spout mortarium	4 th –3 rd BCE
5	79/Y/64/124	4	606	48	East Greek <i>kantharos</i>	Persian
6	79/Y/64/089	4	606	59	Water juglet	Persian
7	79/Y/64/117	4	606	53	Fusiform bottle	4 th –3 rd BCE
8	79/Y/64/128	4	606	48	Pseudo Attic lamp	Hellenistic

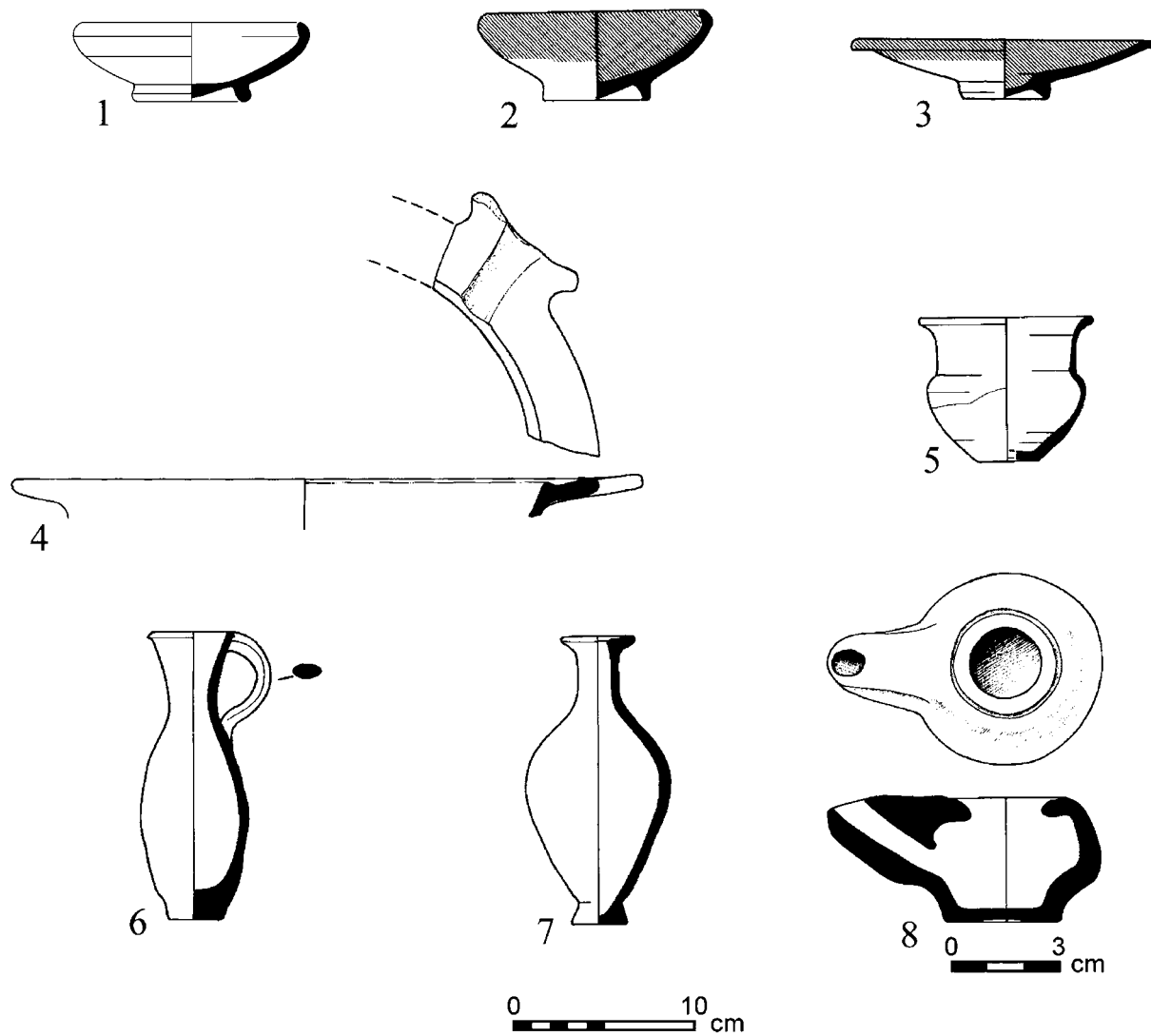


Figure 4.10. Finds from the Red Brick Floor (L.606).

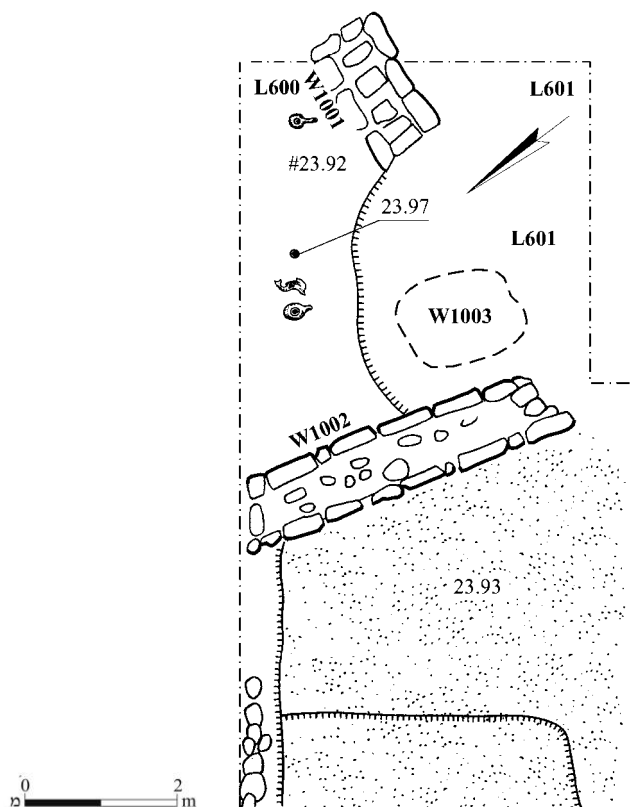


Figure 4.11. The plastered floor (L.600). Courtesy of IAA.

No	Reg. No	Square	Locus	Bucket	Description	Period
1	79/Y/64/116	1	600	46	Chios amphora	4 th BCE
2	79/Y/64/127	1	600	46	Pseudo Attic lamp	mid 4 th –1 st BCE
3	79/Y/64/126	1	600	16	Folded lamp	Hellenistic
4	79/Y/64/129	1	600	16	Dolphin-form lamp	Hellenistic
5	79/Y/64/134	1	600	16	Dolphin Figurine	Hellenistic

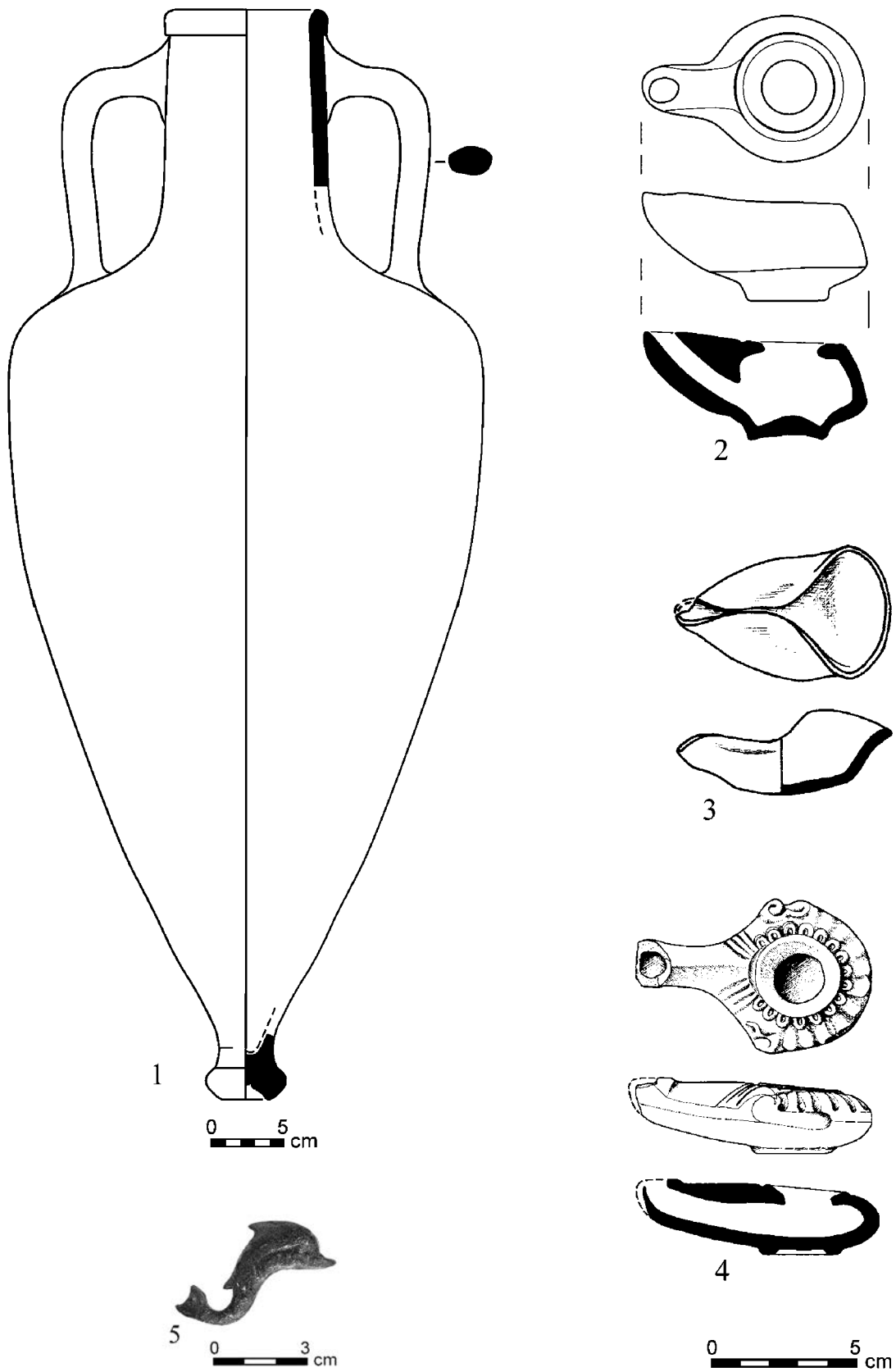


Figure 4.12. Finds from Early Hellenistic plastered floor (L.600)

In general one can say that the area was occupied from the mid to late 6th century BCE until the 2nd century CE. The building was built above Hyksos tombs dated to the 16th century BCE (Kaplan 1965:12). The area was occupied at intervals during the Persian period and probably again in the Early Roman and Islamic periods. Within the Persian–Early Roman structures four occupation phases can be distinguished. The Persian Pit represented the early occupation during the mid to late 6th century BCE. The red brick floor was in use until the 3rd century BCE when a new plastered floor was laid over it. The pottery from below the plastered floor was probably associated with the floor construction and dated to the 4th–3rd century BCE. The plastered floor is dated until the 1st century CE. The finds associated with these occupation phases is diverse and characteristic of high class population. The lack of cooking vessels and the abundance of imported pottery and amphorae can be evidence for commercial activity in this area. The stone pavements associated with the two buried *dolia* were probably related with the oil production in port cities. The buried *dolia* served as containers for oil or wine storage during the 1st–2nd centuries CE. Such complexes were very typical in the coastal cities of Israel and are also found in the Byzantine occupation phases in Yavneh Yam, Apollonia and Caesarea.²³ In Caesarea the *dolia* were associated with mosaic floors and functioned as containers, probably for the liquids remains, in case of breakage.²⁴ Though the evidence is insufficient and the above references comes from later contexts one can accept Kaplan's assumption that the area was Jaffa's agora and the two *dolia* could have been part of a *dolia* storage room within an oil shop located in the agora or the urban commercial area.

²³ Personal communication with Etan Ayalon, February 2011.

²⁴ Patrich 1999:77, 2008:10.

Chapter 5. Area A: The Historic Sacred Center (Tel Yaffo)

Orit Tsuf

Introduction

This chapter focuses on the investigation of the archaeological remains associated with the Persian to Byzantine strata in Area A (Figures 1.1, 5.1), the most significant section excavated by Kaplan in Jaffa. During the 1950s, at a very early stage of Kaplan's excavations, he identified in Area A six to eight occupational phases, beginning from the Late Bronze Age until the Byzantine period (Kaplan 1956a:192–193; Kaplan 1956b).²⁵ In the eastern part of Tel Yafo, Kaplan exposed part of the fortifications of the Persian period and continued to excavate deeper in order to uncover the earlier strata (Figure 5.1). The initial stage of excavations was concentrated on the Bronze Age strata and mainly on the Jaffa citadel. The important drawing marked by him as “Jaffa citadel section until 1958” expresses perfectly Kaplan's oversight of the Persian and Hellenistic strata (Figure 5.2). The excavation focused primarily on the Middle and Late Bronze Age remains, and ignored the strata above them, even though they existed.

Building M complex was the most significant structure exposed during 1970 to 1972 excavations in the northwest part of Area A. This architectural complex is composed of three main structures discovered integrated with each other: Buildings M and N, and the Hellenistic Altar (Building M complex; Plan 5.2). However, despite these discoveries, Kaplan's main effort in the following seasons focused on exposing the early Iron and Bronze Age strata in Area A (Figure 5.3). In his preliminary report he wrote:

the excavation began with the further deepening of the area in the Hellenistic stratum, where the stone altar and the walls of the small hall surrounding it had been exposed...At this point work was stopped in this area... no further investigation was carried out; only the Persian W.800, which is preserved up to two meters in height, was dismantled to allow the area with the Iron Age strata to be enlarged (Kaplan 1974a:50).

The Hellenistic Altar was discovered in 1971. The excavation of the Hellenistic phase continued during the 1972 season. At that stage work stopped in this area. As noted above, Kaplan was interested in Iron Age structures rather than Persian and Hellenistic ones.

Kaplan identified a number of occupational phases within his excavations during the 1970s. Earlier publications reveal a stratigraphic sequence that was identified for the Area A, Lion Temple (Kaplan 1971), which was far more robust than the levels identified in later presentations of the area's sequence (see Kaplan and Ritter-Kaplan 1993:657–658). The latter sequence clearly omits “Early Arab, Byzantine, and Roman” remains that were suggested to be “absent” (Kaplan and Ritter-Kaplan 1993:657).

This discussion is restricted to phases 8 to 4, among the eleven major phases identified by Kaplan (Kaplan 1971 and table 5.A). The excavations in Area A were conducted during two separate periods of time, the 1950s and 1970s. Three general periods of abandonment were defined in Area A. The first stage represents the period until the destruction at the end of Iron II (phases 11 to 9). The second appeared while the area was gradually filled with a layer of varves that sealed the lower strata (phase 8). The third was before the reoccupation of Area A during the early Persian period, after a period of abandonment, which continued until the late 6th century BCE (Table 5.1).²⁶

Phase 8: Late Iron Age Abandonment? (mid-6th cent. BCE)

Area A was covered after the Iron Age with windblown sand, a phase of abandonment suggested by alternating varves of sand and clay (Kaplan 1971:20) (Plans 5.3–5.4). This layer sealed earlier phases of occupation, which are not discussed here. This phase, according to pottery, which was found below W.800, may be dated to the late 6th century BCE. An additional find of a fragment of a terracotta figurine consisting of a preserved head of a horned animal is dated from Late Iron Age to the Persian period [No. 14.4].

²⁵ Kaplan 1970b: Eight occupation phases from the 7th/6th century BCE to the 1st century CE.

²⁶ The appearance of a 7th/6th century hole-mouth jar in Area H, above the “clean sand layer” is additional evidence for the dating of the first phase above the varves to the mid-6th century BCE.

Kaplan's Strata		Architectural Remains	Proposed Dating	Architectural Remains
1971	1993			
8	III Post Iron Age		7 th –early 6 th BCE	Varves layer – Abandonment phase
7b	IIB 5 th BCE	Sidonian warehouse	Mid 6 th BCE	Persian/Sidonian Wall. Persian Pits
7a	IIA 1 st half of 4 th BCE		5 th – Mid 4 th BCE (520–375) ²⁷	Building M Complex. First stage.
6	IB 3 rd – 2 nd BCE	A Square Tower/Citadel. Hellenistic altar.	Mid 4 th –2 nd BCE	Building M Complex. Second stage. Casemate wall attached to Hellenistic wall. Square tower/Citadel
5	IA 2 nd –1 st BCE	A Casemate wall attached to Hellenistic wall.	2 nd BCE– 1 st BCE/1 st CE	Hellenistic altar.
4	Roman– Byzantine period 70–640 CE		Late Roman– Byzantine period	Byzantine mosaic floor; the Pool/Refuse Pit

Table 5.1. Occupational sequence in Area A, Lion Temple in comparison to Kaplan's publications (Kaplan 1971, Kaplan and Ritter-Kaplan 1993).

Phase 7b: The Early Persian Period (late 6th cent. BCE)

The exposure of the early Persian remains was limited. In the eastern part of Tel Yafo, above the Bronze–Iron Age's citadel, the Persian City wall was exposed, and in the western part of the Building M complex became visible above the sand varves (Phase 8).

The Fortifications

The wall was identified by Kaplan as a "Sidonian wall segment," sunken into the Bronze Age occupation phase and enclosing the Sidonian city that was uncovered in the eastern part of Jaffa (Kaplan 1956b:259). The exposed part of the north-south wall is 25.0 m long (squares F5, F6, G7, G8, H8, H9, I9) and 2.0 m wide (Figures 5.1, 5.8 – 11). At its southern end the wall heads were preserved up to an elevation of 30.88 m ASL (Sq. F5) and 28.38 m ASL (Sq. I9) on the north.

The wall was built of local kurkar ashlar in the header technique with constant gaps in order to create strengthening piers (Kaplan 1959:78; Sharon 1987: Table 1:c) (Figures 5.5.–5.7).²⁸ The header technique was usually used for fortification architecture. Within every gap in the wall, ashlar block piers were inserted built in the header-stretcher technique (Figure 5.6). The walls of Jaffa were built probably in the same manner according to surviving drawings and photos. The piers were constructed of alternating courses of headers and

²⁷ Stern 1989:117–118 Stratum IV (Dor).

²⁸ Sharon 1987:32 Table 2. The header–out type of wall usually included several header rows, according to the wall's function. The technique was familiar in the East Mediterranean Iron Age and Persian period. In Israel the technique appeared already during the 10th to 9th century BCE in Megiddo, Samaria and Dan and continued in Umm el–Amad, Sukas, and Dor until the 2nd century BCE.

stretchers above each other in the width of five header blocks (Plan 5.1, Section I–I; see blackened stretcher blocks). According to the analysis of the wall we can conclude that a mixed technique was used in its construction. In Israel the alternation of piers with the header technique was a very common feature in fortification walls.²⁹ At nearby Tel Qudadi a similar wall was discovered dated to the Persian period (Sukenik 1939: 167–68).

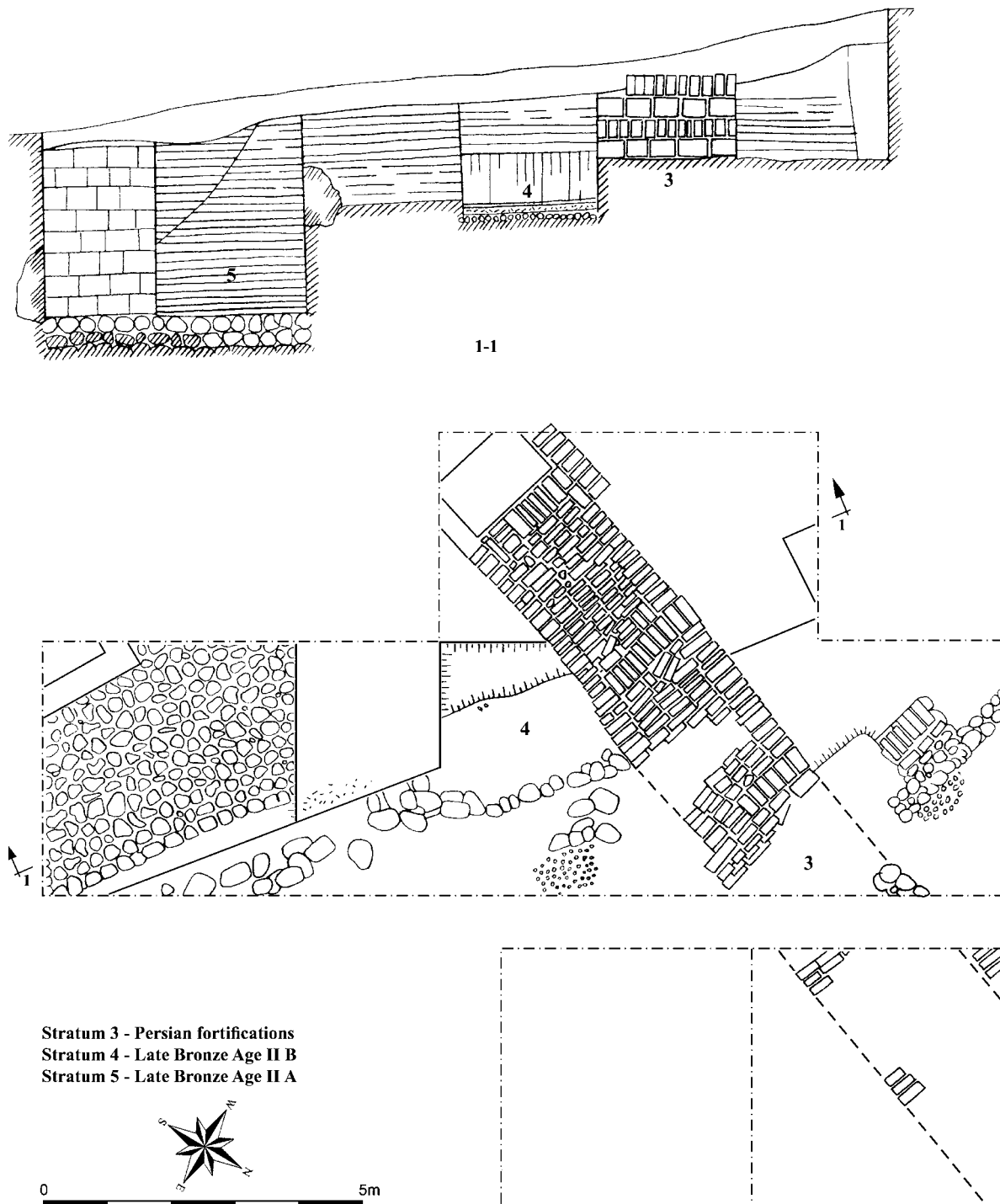


Figure 5.1. Area A excavations in 1955. Kaplan Archive, redrawn by the IAA.

²⁹ Van Beek and Van Beek 1981:75 described the Persian wall in Jaffa as ashlar pier alternating with header blocks.

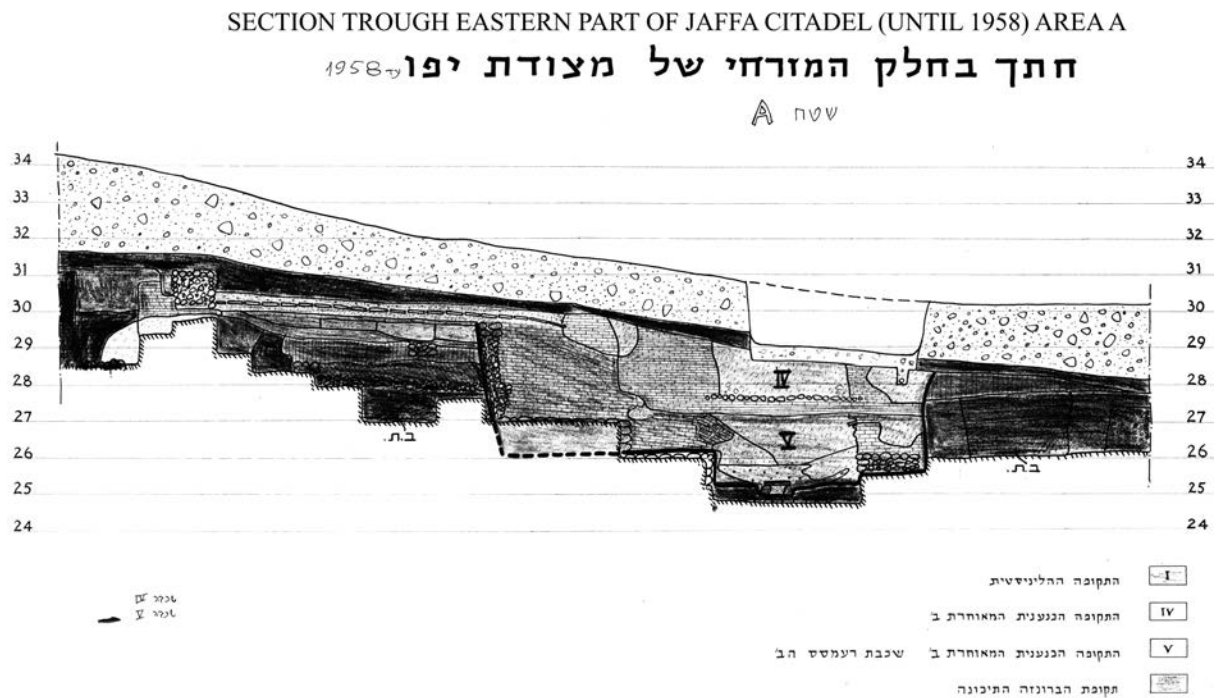


Figure 5.2. Copy of composite section drawing through Area A excavations from 1955 to 1958. Kaplan Archive.³⁰



Figure 5.3. Start of excavations in Area A. Kaplan Archive.



Figure 5.4. Dismantling Building M in order to expose the lower phases. Kaplan Archive.

³⁰ Level VI – Middle Bronze Age, Level V – Late Bronze Age II (Ramesside), Level IV – Late Bronze Age II, Level I – Hellenistic Period.

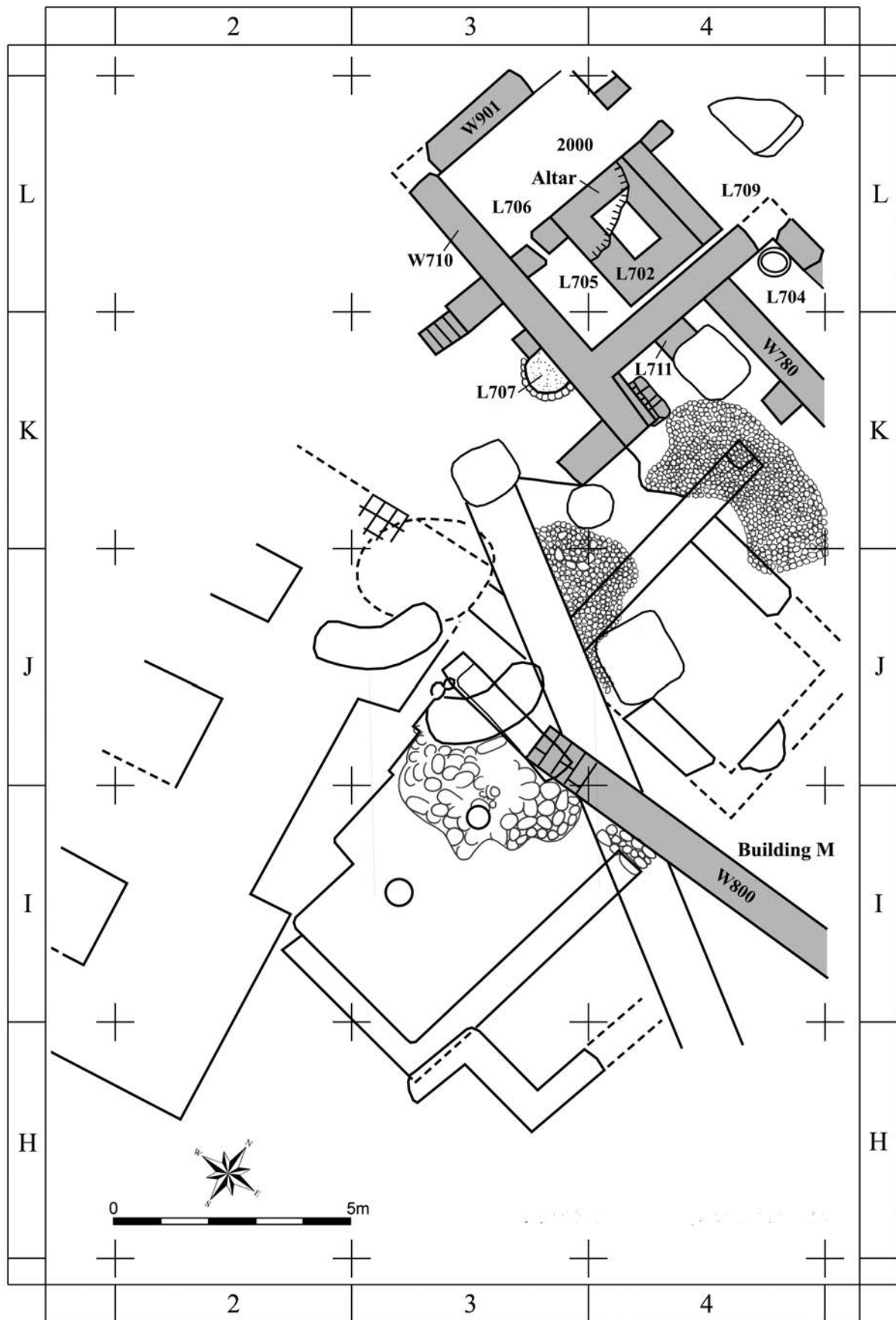


Figure 5.5. Graphic diary season 1972, Jaffa.

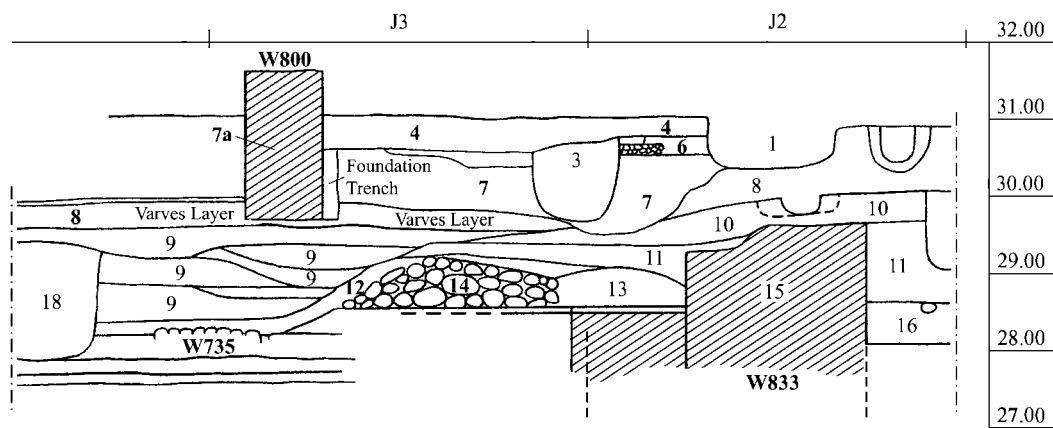


Figure 5.6. Section J2-J3 (Western Side). Courtesy of IAA.

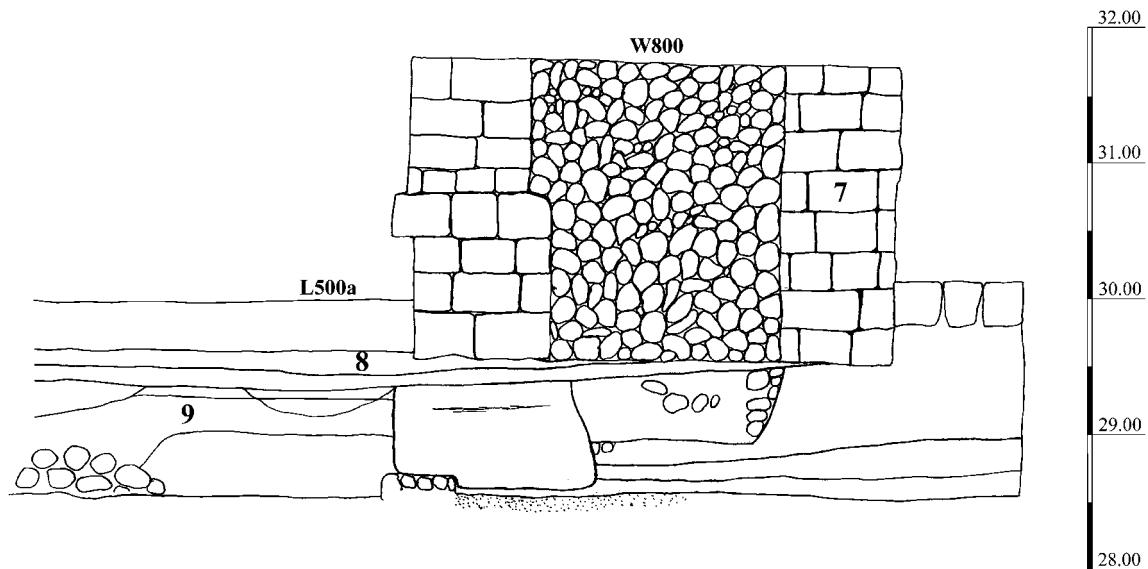


Figure 5.7. W.800 section. Kaplan Archive, redrawn by IAA.



Figure 5.8. The Persian City Wall, looking west. Kaplan Archive.



Figure 5.9. The Persian Wall, looking west. Kaplan Archive.

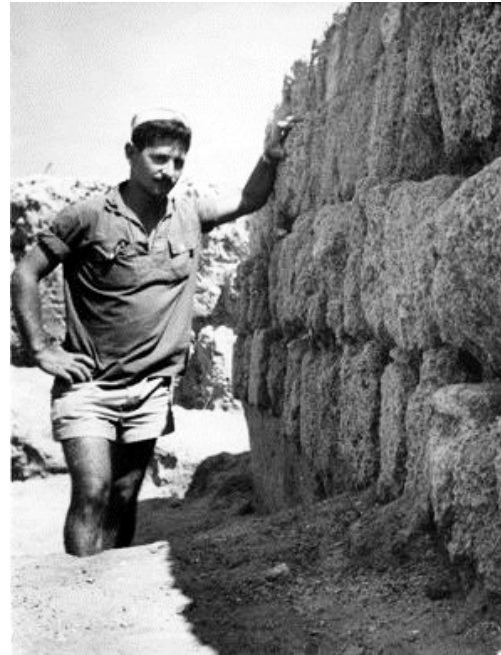


Figure 5.11. The Persian Wall, looking southwest. Kaplan Archive.



Figure 5.10. The Persian Wall, looking west. Kaplan Archive.

In the vicinity of the Persian wall (squares H8–H9, G7) pottery was exposed dating from the Early Persian until the late Hellenistic periods (Figure 5.8:1–13). This may point to the possibility that the Persian wall continued to function until the 2nd century BCE. The appearance of a few Early Roman fragments cannot be clear indication for occupation. Some were found on the surface and others were probably collected in mixed buckets.

No.	Reg. No.	Square	Locus	Description	Period
1	79/A/55/112	H8		East Greek Banded bowl	6 th BCE
2	79/A/55/119			Black Figured amphora	Early/mid 6 th BCE
3	79/A/55/109	G7	6B	Attic Black Glazed plate	300–275 BCE
4	79/A/55/132	H9		Attic Black Glazed bowl	4 th –3 rd BCE
5	79/A/55/129	H8	3B	West Slope Ware	2 nd BCE
6	79/A/55/114			Moldmade Relief bowl	2 nd –1 st BCE
7	79/A/55/133		B	Local Red Slip fish plate	2 nd – early 1 st BCE
8	79/A/55/108	H9	D1	South Italy Campania A plate	2 nd BCE
9	79/A/55/100		B	Fluted-spout mortarium	4 th –3 rd BCE
10	79/A/55/098			Globular pot	Hellenistic
11	79/A/55/105			Amphora	Hellenistic
12	79/A/55/103	H8	4B	Straight shoulder jar	5 th –4 th BCE
13	79/A/55/106			Folded lamp	2 nd –1 st BCE

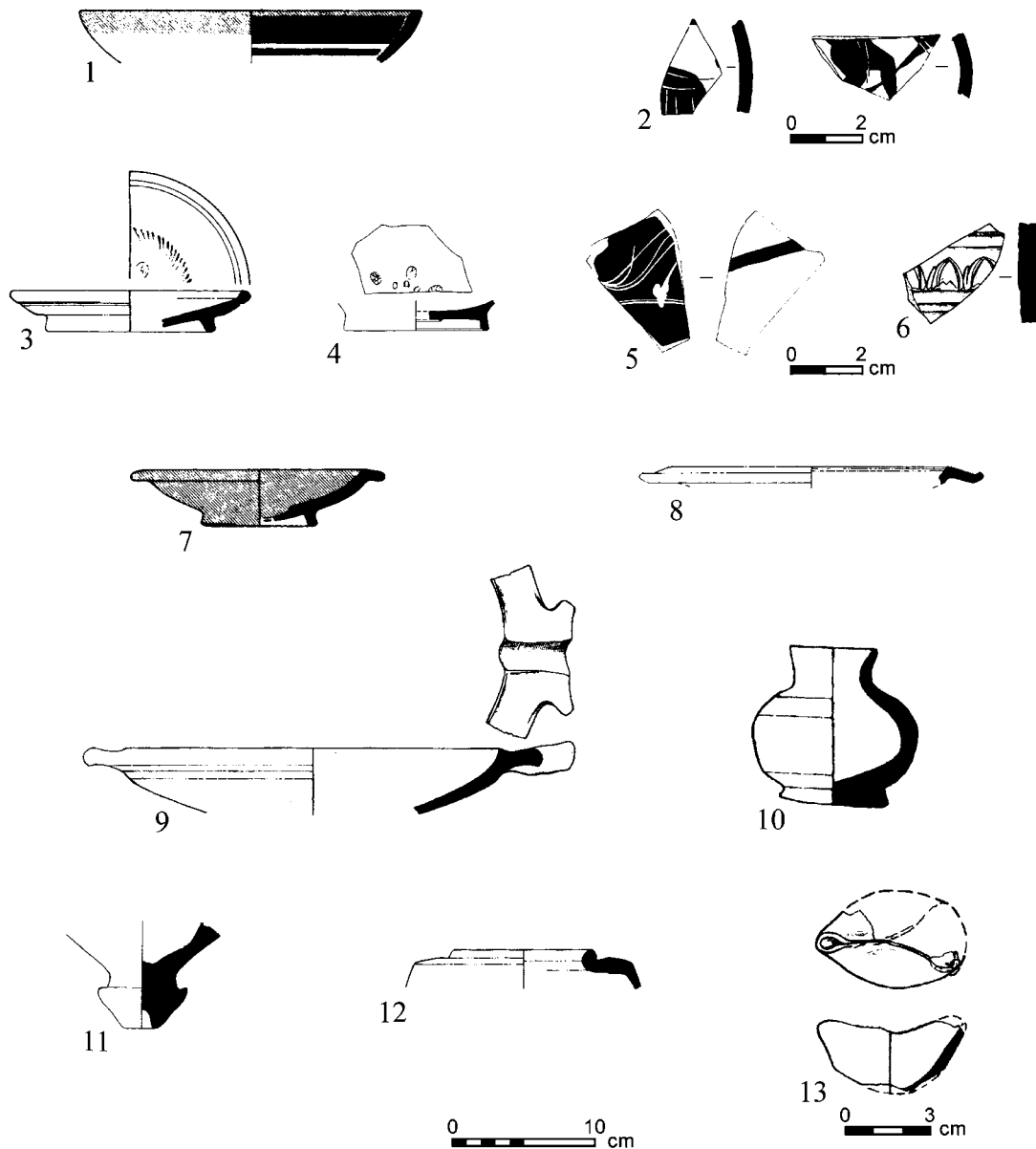


Figure 5.12. Selected Pottery associated with the Persian Fortifications.

Persian Pits

The Persian pits were uncovered below the early Building M complex (Ritter-Kaplan 1982:65–66). Two of them are probably those that are represented in Section A–A as sealed by the stone floor of Building M (Locus 509) (Plan 5.5).³¹ According to the pottery found below, this floor was dated to post 7th–6th century BCE. Ritter-Kaplan mentioned the discovery of wall segments in this phase with no clear plan (Ritter-Kaplan 1982:66). It seems that the first stage of the building did not survive except for a single narrow rubble wall reaching a height of 29.04–28.78 m. This wall probably represents the pre-Building M phase dated to late-6th to 5th centuries BCE.

Phase 7a: Late Persian Period

During the late Persian period a few changes occurred in Area A. A new structure (“Building M”) was erected next to the Early Persian fortification. Building M was erected above the Early Persian pits (see above Plan 5.6) above the varves layer (Phase 8) and the Persian pits (Phase 7b) (Plans 5.3, 5.5, Table 5.1). It was described by Ritter-Kaplan as a Sidonian warehouse for Attic commerce arriving at the port of Jaffa (Ritter-Kaplan 1982). The preserved wall of the building was built in the common Phoenician ashlar, pier and rubble technique (Figures 5.9–5.10, Plan 5.6).

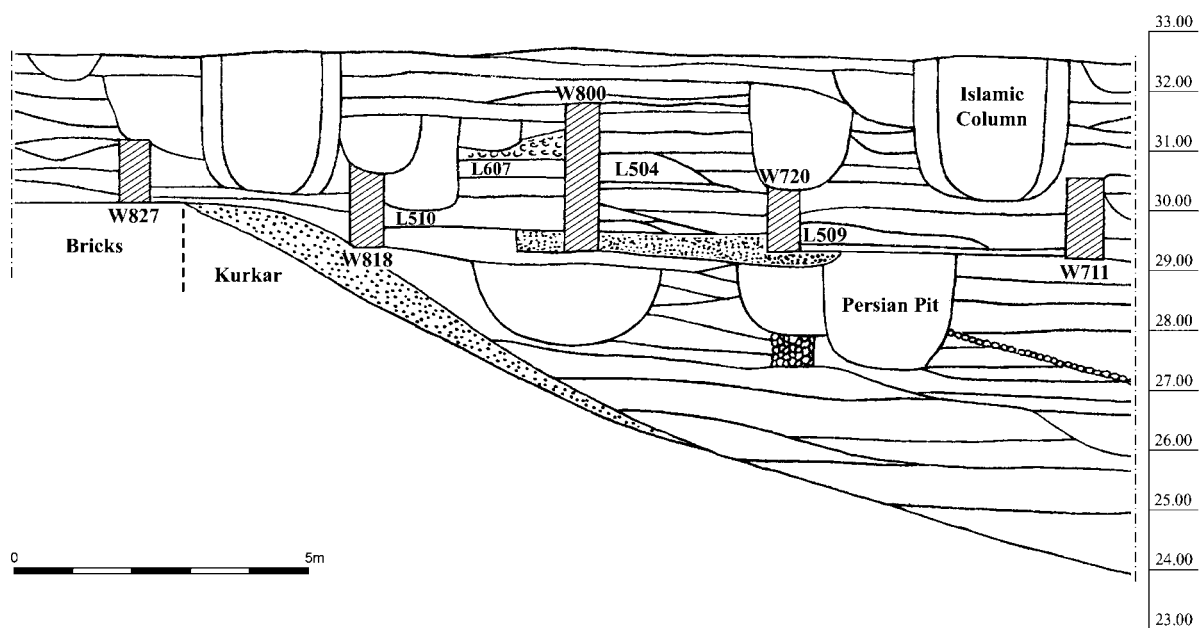


Figure 5.13. Building M, section A–A. Kaplan Archive, redrawn by IAA.

Building M complex, First Stage

The core of the building was enclosed by W.800, W.722, W.720, W.719, and W.711 (Plan 5.6). W.800 was oriented east-west and is presented in Plan 5.3, above the Middle Bronze–Iron Ages structures. This wall reached the height of 2 m before it was dismantled. The north-south oriented wall W.722 was attached to W.800 at its west end. W.720 ran parallel to W.800 and was attached to the north end of W.722. W.719/704a lay parallel to W.722 and was attached at its south end to W.720. W.711 was parallel to W.720 and W.800 and was probably attached to W.719 at its west end.

³¹ Another pit that was illustrated as Pit 5a will be published by Aaron A. Burke and Martin Peilstöcker in a forthcoming study of Kaplan’s excavations of the Bronze and Iron Ages strata in Jaffa.

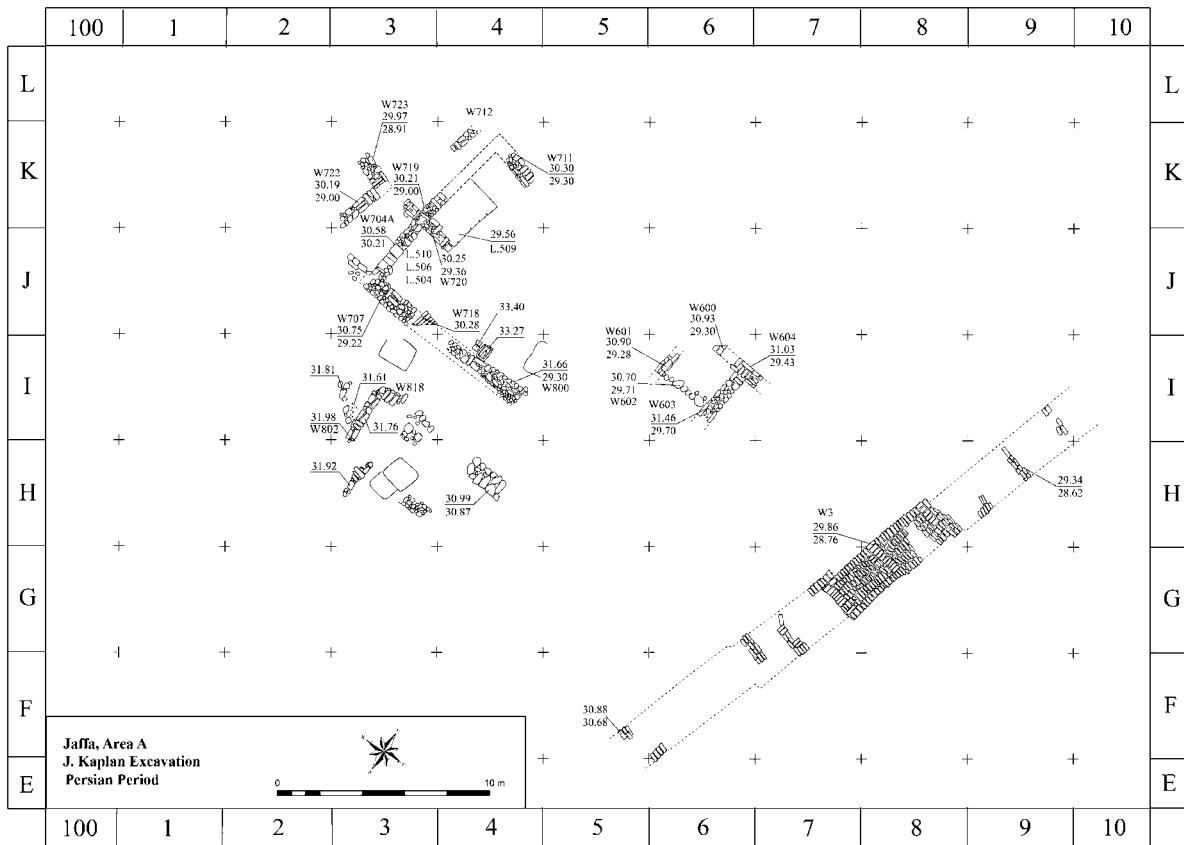


Figure 5.14. Building M complex, Persian Period.



Figure 5.15. W.800 built in ashlars pier alternating with rubble wall technique. Kaplan Archive.



Figure 5.16. Segment of W.800. Kaplan Archive.

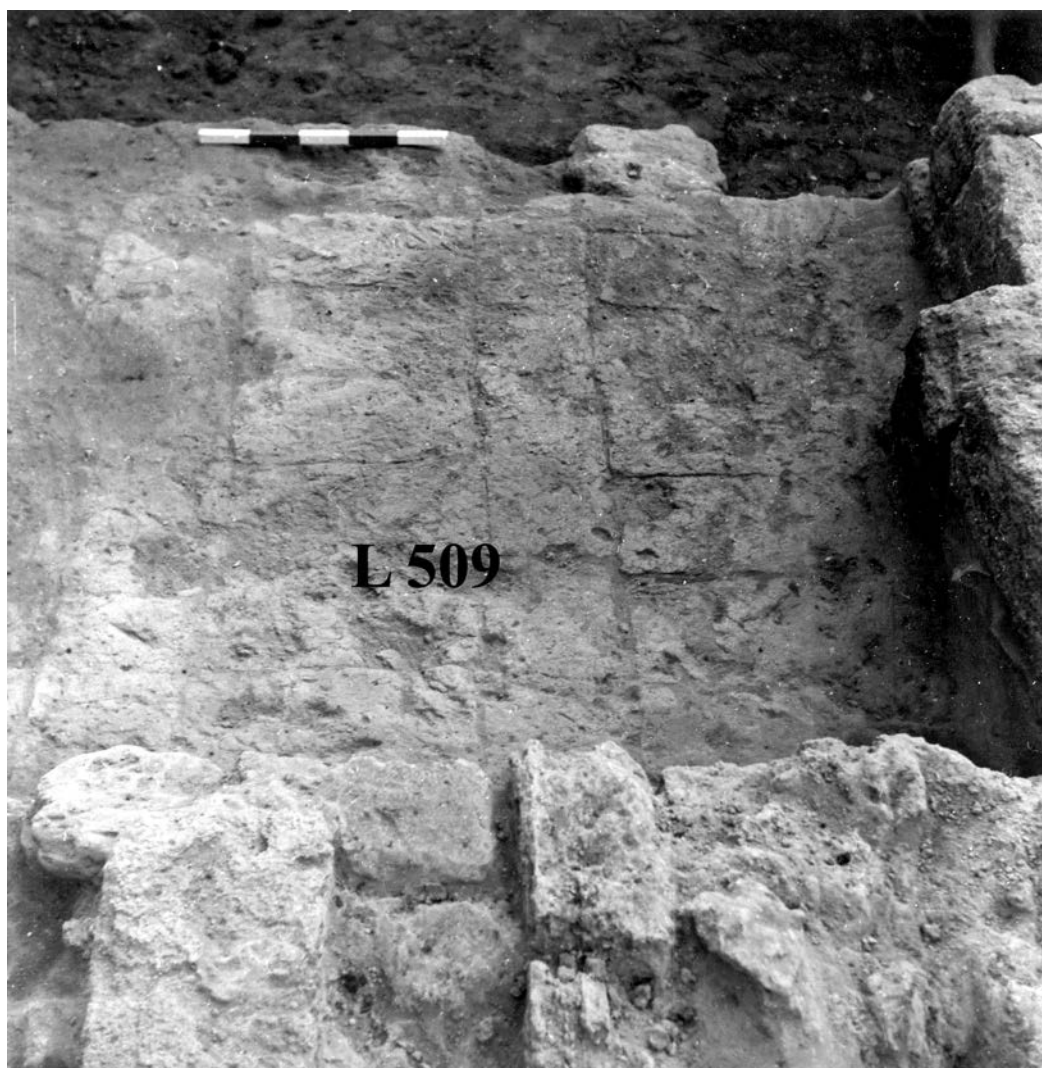


Figure 5.17. Stone Pavement (L.509). Kaplan Archive.

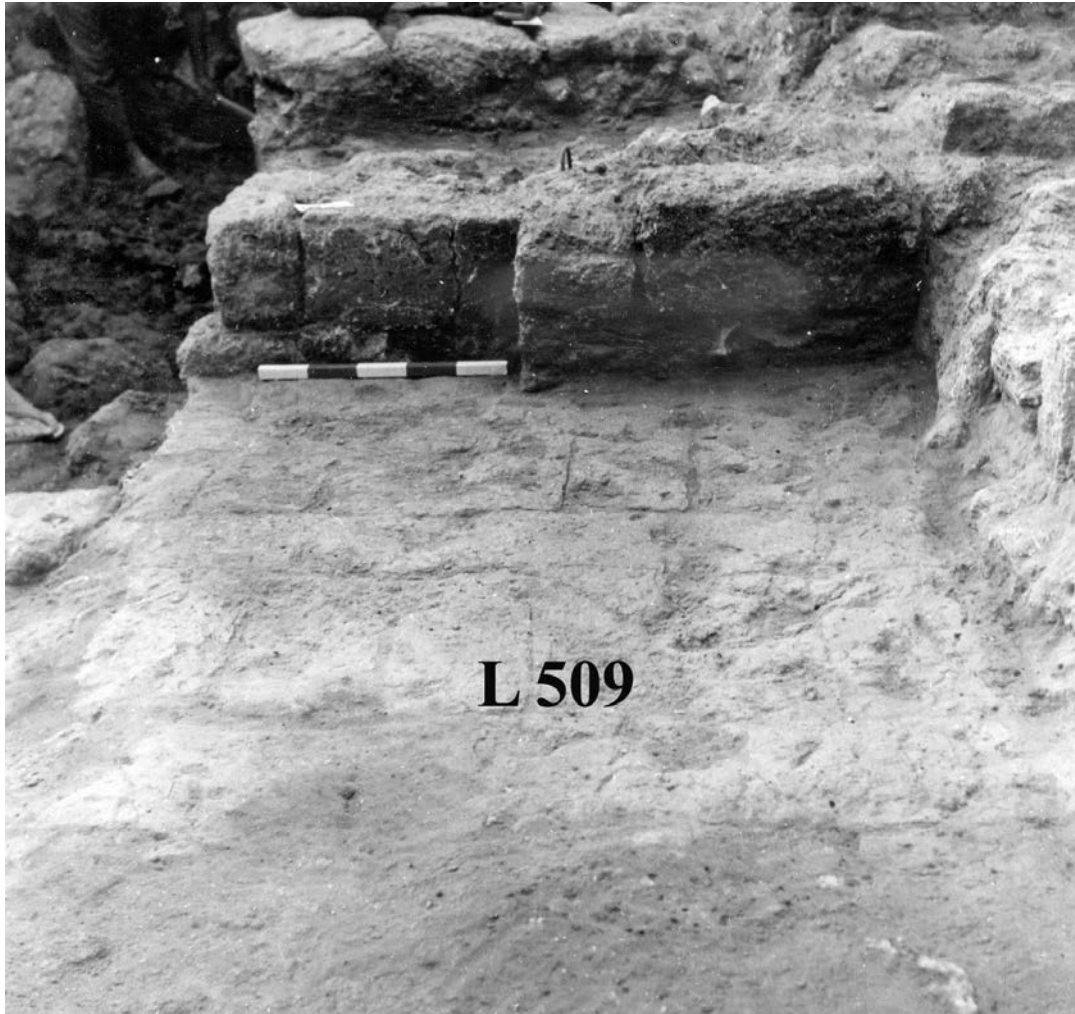


Figure 5.18. Stone pavement (L.509). Kaplan Archive.

The wall top was between 30.75 m (W.800) and 29.59 m ASL (W.719). The bases of the walls were at a height of 28.54 m (W.719) and probably cut through the varves layer which reached a height of 29.68 m (see Phase 8b in Figure 5.14). Building M was paved with square stone slabs. A segment of the pavement was found attached from the south to W.720 and from the west to W.719 (Figures 5.12–5.13, Plan 5.6). The floor's (Locus 509) elevation was 29.49 m. ASL (Figure 5.13) and sealed a Persian pit (Figure 5.5). Above the paved floor beaten hamra layers (Locus 510) were attached to both sides of W.800, west of W.722 and north of W.720 (Plan 5.6). Locus 509 was a floor foundation below the hamra floor (Locus 510). The pottery associated with the floor dates the floor occupation to the late 5th to early 4th century BCE.

Other wall segments in squares H3–I3 (W.818, W.802) were built in the same technique and were probably part of the same structure. Additional confirmation for the fact that W.711, W.729, W.800, W.818, and W.827 are associated with Building M is illustrated in Section A–A (Figure 5.5). In this section these walls appear at equal heights and levels. In addition, Building N walls (W.600–W.604) were built in the same pier and rubble technique (Plan 5.6) and were probably part of the same building. The pottery associated with the foundation trench of W.800 dates to the late 7th–late 5th century BCE. The building was probably erected during the late 5th century.

At this stage it is impossible to identify the building's plan even though Ritter-Kaplan reconstructed it with an inner courtyard leading to storerooms (measurements: 18 x 17 m) (Ritter-Kaplan 1982:66). However, her assumption was based on very few wall remains. The destruction can be dated according to an assemblage of Persian winged arrowheads found on the building floors [Nos. 10.85–10.90, 98, 104–105] (PBs 58, 184, 254, 577, 589, 613). The arrowheads appeared mainly above the floor in squares I3–I4 between W.800 and W.818. These arrowheads date to the 4th century BCE and thus can be associated with the destruction of the Phase 7a building.

Phase 6: The Hellenistic Period (late 4th–2nd cent. BCE)

The major architectural transformations occurred during the Early Hellenistic period. Building M complex was renovated as well as the Persian fortifications.

The Hellenistic Fortifications

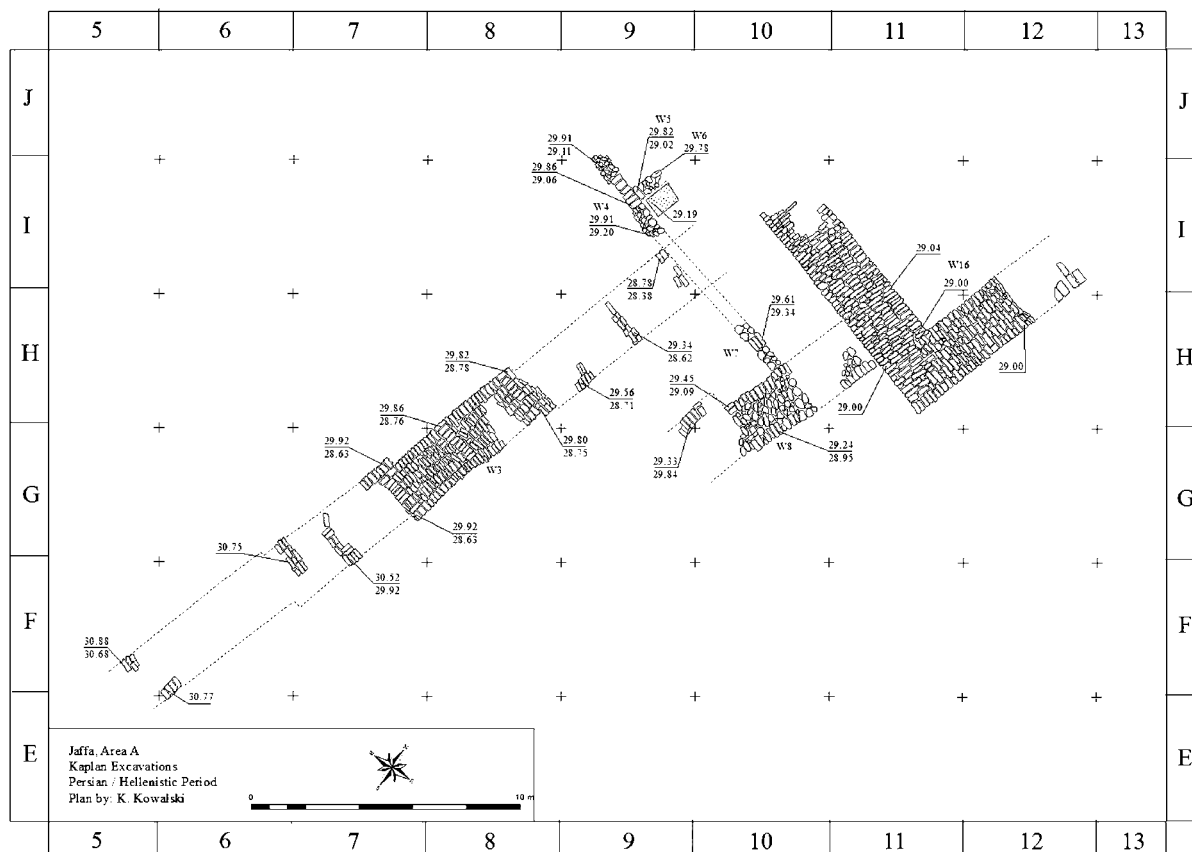


Figure 5.19. The Hellenistic fortifications in Area A.

As was mentioned above, it is likely that the Persian city wall continued to function during the Early Hellenistic period. However, sometime during the Hellenistic period additional fortifications were built. The remains of two new Hellenistic walls, W.8 and W.9, could be identified (Figure 5.19). The orientation of both walls was parallel to the Persian wall. W.8 was built of header ashlar with a rubble core (2 m wide). The parallel W.9 was poorly preserved. They reached a height of 29.33 to 28.95 m ASL. W.8 may be the one described by Kaplan after the 1958 season as the Hellenistic wall associated with the casemate edifice (Kaplan 1960b:134–5) Attached to W.8 on the west were W.7 and W.4 running across and above the north end of the Persian wall (I9–I10) (elevations 29.06–29.91 m ASL). The northern part of the Persian wall probably ceased to function during that period. Both W.4 and W.7 were oriented east-west and built of ashlar piers of header or stretcher blocks alternating with rubble (Plan 5.7). W.4 and W.7 were probably linked with wall W.5 and the parallel W.6, which together form the “casemate” wall described by Kaplan in the Hellenistic phase (Kaplan 1956b:259; see Plan 5.7).

Kaplan described the exposure of a large quantity of pottery, clay figurines, many ostraca, and bronze coins close to the casemate edifice (Kaplan 1956b:259). Within squares I8–I9 rich pottery assemblages were exposed that are dated from the Persian period to the late 1st century BCE (Figure 5.14:1–14). The mixed nature of the finds provides minimal assistance in the attempt to date the fortification complex.

The Tower or Citadel

A square tower or citadel was connected to the Hellenistic wall (Kaplan 1960b:134; 1961:192; see Figure 5.7). Hellenistic W.8 is connected at its north end with the massive wall W.16. Both W.16 and W.15 were linked together to form part of a fortified tower (8.0 x 8.0 m). The square structure was probably the corner foundations of a citadel built of dressed masonry blocks. The four preserved courses of the wall foundation were built in a foundation trench dug through a MB II structure (Kaplan 1961:192). It is not clear how that structure was connected to W.8 which was preserved to a higher level (29.52 m) than the tower (elev. 29 m ASL; Plan 5.7; Figure 5.15).

The tower was dated by Kaplan in 1958 to the 1st century CE (Kaplan 1960b:134), though after the 1960 season it was described as a pre-Hasmonean squared citadel built of ashlar blocks dated to the 3rd century BCE (Kaplan 1970b:201; 1993:587). The attempt to define the exact occupation phase of this structure according to associated finds from the 1958 to 1960 excavations was almost impossible. The 1958 finds were not recorded (squares H11–H12, I11–I12). However, an assessment of the most common general types revealed the dominance of imported tableware dated from the 4th/3rd century BCE to the 1st to mid-2nd century CE (Figures 5.16:1–13).

In summary, the Hellenistic fortification complex may have been built during the 4th century BCE in addition to the Persian wall. The new addition was built in the same traditional Phoenician technique. The casemate wall is the common type of fortification at coastal sites. These walls exemplify traditional Phoenician architecture and resembled the Persian header technique. At Tell Megadim a Persian casemate wall was exposed (Stern 1977:18; Broshi 1968:256–7) and at Tel Mevorakh a 4th century BCE structure enclosed a rural estate. The external wall was built of kurkar ashlar with alternating header-stretcher blocks, while the internal wall was built of ashlar piers alternating with rubble walls (Stern 1977:18). The Tel Mevorakh example indicates the continuation of the Phoenician tradition during the Early Hellenistic period. The header-stretcher technique, the ashlar piers with rubble wall technique, and the mixing of both techniques were part of the same Phoenician tradition (Stern 1977:18). Although there is no clear physical indication concerning Jaffa's Hellenistic casemate wall, it may be assumed that it was built according to the traditional Phoenician standards. The ashlar piers with rubble wall is characteristic of Building M discussed above and below.

No.	Reg. No.	Square	Description	Period
1	79/A/56/172	I9	East Greek krater	Persian/early Hellenistic?
2	79/A/56/149	I9	East Greek bottle	6 th – late 2 nd BCE
3	79/A/56/204	I8	Black Figure Boeotian bowl	4 th BCE-
4	79/A/56/163	I9	Attic Black Glazed bowl	late 5 th –4 th BCE
5	79/A/56/156	I8	Attic Black Glazed bowl	400–350 BCE
6	79/A/56/264	I8	Moldmade Relief bowl	2 nd –1 st BCE
7	79/A/56/255	I9	ETS A bowl	End 2 nd –10 CE
8	79/A/56/024	I8	ETS A bowl	mid 2 nd – 1 st BCE
9	79/A/56/260	I9	Local Judean bowl	1 st BCE–1 st CE
10	79/A/56/183	I8	Mortarium	late Persian
11	79/A/56/185	I9	Flask	late 5 th –3 rd BCE
12	79/A/56/150	I9	Phoenician juglet	3 rd –2 nd BCE
13	79/A/56/208	I8	Straight-shoulder jar	5 th –4 th BCE
14	79/A/56/179	I9	Stopper	late 3 rd – mid 2 nd BCE

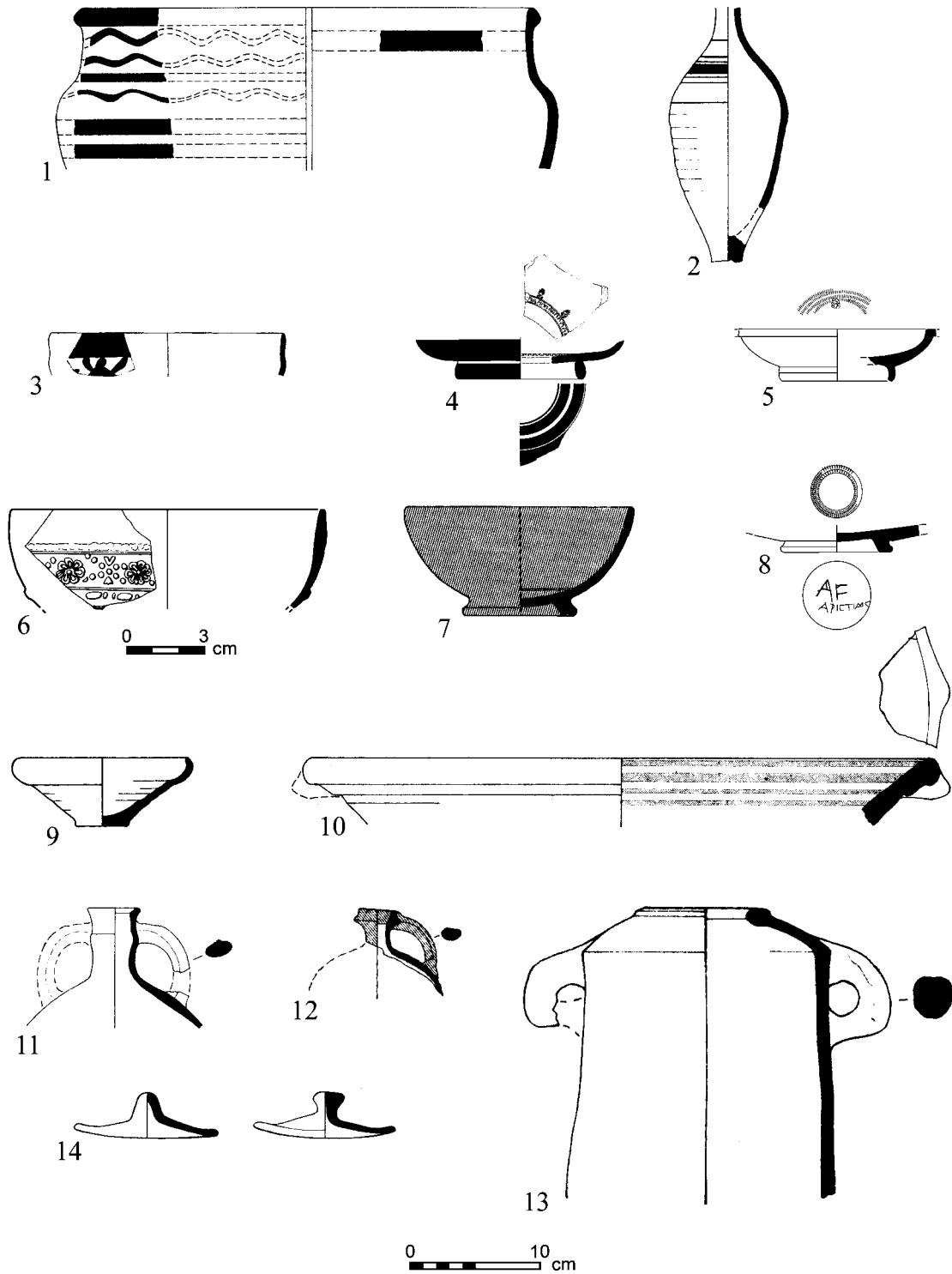


Figure 5.20. Selected pottery associated with the Hellenistic fortifications.



Figure 5.21. The Citadel corner, looking north. Kaplan Archive.

No.	Reg. No	Square	Locus	Bucket	Description	Period
1	79/A/58/068	G12			Black Glazed plate	4 th –3 rd BCE
2	79/A/58/078				Black Glazed plate	4 th –3 rd BCE
3	79/A/58/142				Local Red Slip bowl	2 nd – early 1 st BCE
4	79/A/58/103				West Slope plate	2 nd BCE
5	79/A/60/001				Local Red Slip bowl	2 nd – early 1 st BCE
6	79/A/60/003	H11	350	57	ETS A bowl	late 2 nd –1 st BCE
7	79/A/58/072	H11			ETS A bowl	late 2 nd –10 CE
8	79/A/58/077	H12			Cy TS	Early Roman
9	79/A/58/144				Cy TS	100–150 CE
10	79/A/58/145				ETS A bowl	mid 2 nd –1 st BCE
11	79/A/58/076	G12			ETS B	Early Roman
12	79/A/58/073	H10			SEA amphora	4 th BCE
13	79/A/60/008	H11	350	57	Delphiniform lamp	2 nd –1 st BCE
14	79/A/58/143				Kite-shaped lamp	2 nd –1 st BCE

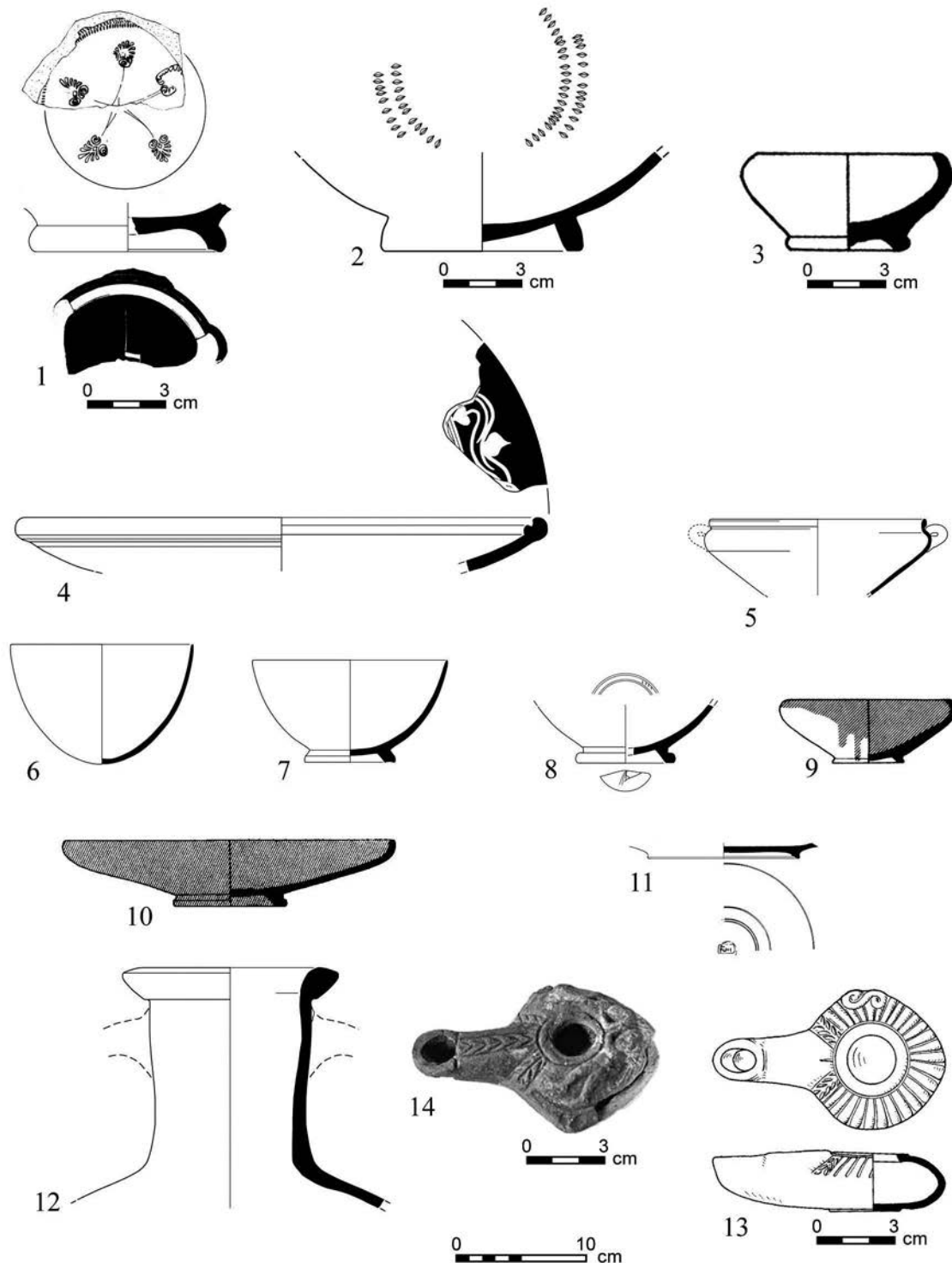


Figure 5.22. Selected Pottery associated with the Tower or Citadel.

The tower or citadel was built in the header technique,³² the common one used for fortification structures, which permits the building of wide and relatively stable walls. Similar architectural planning appears at other coastal sites under Phoenician influence. For instance, the seawall of Ashkelon's Hellenistic temple was built of three courses of header blocks (Garstang 1924:pl. 2), and at Akko (Ptolemais) a citadel dated to the 3rd century BCE was built in the same technique (Dothan 1976:74–71). At Dor several buildings were found in connection with fortifications or other large supporting structures, all in the header technique (Sharon

³² Sharon (1987, Tables 1 and 2) for unknown reasons described the structure as built in the header-stretcher technique.

1987:fig. 5). At Gamla round tower was discovered built of basalt in the header technique, dated to the Hellenistic period (Yavor 2010:17–18). Dothan noted that the same Phoenician architecture was exposed in Persian–Hellenistic ‘Atlit and Samaria (Dothan 1976:71–74).

In accordance with the existing evidence, the following conclusions can be suggested. The square tower, built with header ashlar (W.15,W.16) as well as two additional walls (W.7, W.8), were part of the same complex. Both structures were connected to a casemate wall (W.4–W.7). The square tower was probably one of many towers integrated within the Hellenistic structures and the whole complex was part of the Hellenistic fortifications of Jaffa. The finds and especially the pottery provide a general idea about the date of the whole complex. It is not clear exactly when the fortifications were erected (probably during the late Persian/early Hellenistic period) or when it went out of use (perhaps during the Early Roman period). However, a clue may be found in the appearance of three stone catapult balls among the 1958 assemblage. Similar catapult balls appeared in the dwelling found in Area C, which was destroyed at the time of the Great Revolt against the Romans in 67 CE during Vespasian’s campaign. I suggest that the Romans were then trying to break through the Hellenistic/Early Roman wall to conquer the upper city.

The Hellenistic Building M Complex

The core of the building complex described above continued to function during the Hellenistic period. However, some changes took place in it. It is still not clear what the original function of the building was, but it may be suggested that during the Hellenistic period it served as workshop for an iron industry. Kaplan identified remains of an iron workshop (heaps of industrial waste) all over this area (Kaplan 1972b:17). The floor of this period was covered with a 7 cm thick layer of sand mixed with a large quantity of charcoal. Kaplan says that next to the wall (probably W.800) a rectangular stone basin was found with an iron knife inside, and on the floor there was an iron sickle blade (Kaplan 1972a:10). During the 1972 season the iron heaps were dismantled and a charcoal layer was exposed above the floor together with a quantity of intact iron objects, mostly weapons (Kaplan 1974a:50).

Indeed, evidence for the iron workshop layer was also uncovered next to the south face of W.800 and within squares I3–I4, H2–H3. In addition, a large amount of formless iron slag and slag cakes was exposed within these squares. However, the building plan is still unclear. The following description will concentrate on several floor phases which should explain the various building occupation phases during the Hellenistic period.

The charcoal layer (L.500a) was exposed attached to the south face of W.800, probably above L.510. The charcoal layer appeared at a height between 30.00 to 29.55 m and was 0.45 cm thick. Within the charcoal layer industrial waste, including iron slags were found. Most interesting is the discovery of an iron rod which was used in the process of melting the iron and iron slag.³³ In addition, “above a layer of ash“ (PB 349) an iron blade and nails were discovered. The pottery above the charcoal layer (L.500a, PBs 349 and 352) was dated from the Persian period until the 2nd century BCE.

Above the charcoal layer (L.500a) additional Hellenistic floors appeared. Some are hardly identifiable since the architectural associations of these floors were not documented. However, the floors appeared at heights of 30.38–29.60 m (L.505, 506, 507, 508) and may be dated from the late 2nd to the early 1st century BCE, according to associated pottery. Two more floors were exposed, attached to the southern (L.607) and northern faces (L.504) of wall W.800. Both floors appeared at a height of 29.97–30.70 m. The first floor (L.504) was associated with pottery dated from the 4th century BCE until the 1st century BCE. The second floor (L.607) was a beaten floor made of pottery sherds and stones (Figure 5.5). Found within this locus were many iron slags and fragments of slag cakes for the iron industry. Within the slag level two coins of Alexander the Great issued at Sidon were recovered (Ritter-Kaplan, 1970–1972; 1982:65–66). The floor was called

³³ Personal communication with Sylvan Bouvais, who examined the Iron Age workshop slag and other finds, December 2007.

by Kaplan “the Attic Floor“ (Figure 5.5).³⁴ It is probably associated with the lost assemblage of ten identical Attic vessels that were supposedly recovered from this context (Ritter-Kaplan 1982:66).³⁵

A charcoal layer (L.608) appeared above the Attic floor (L.607) between W.800–801 in squares I3–I4 (Figure 5.5). The associated pottery was dated from the Persian period until the 2nd century BCE.

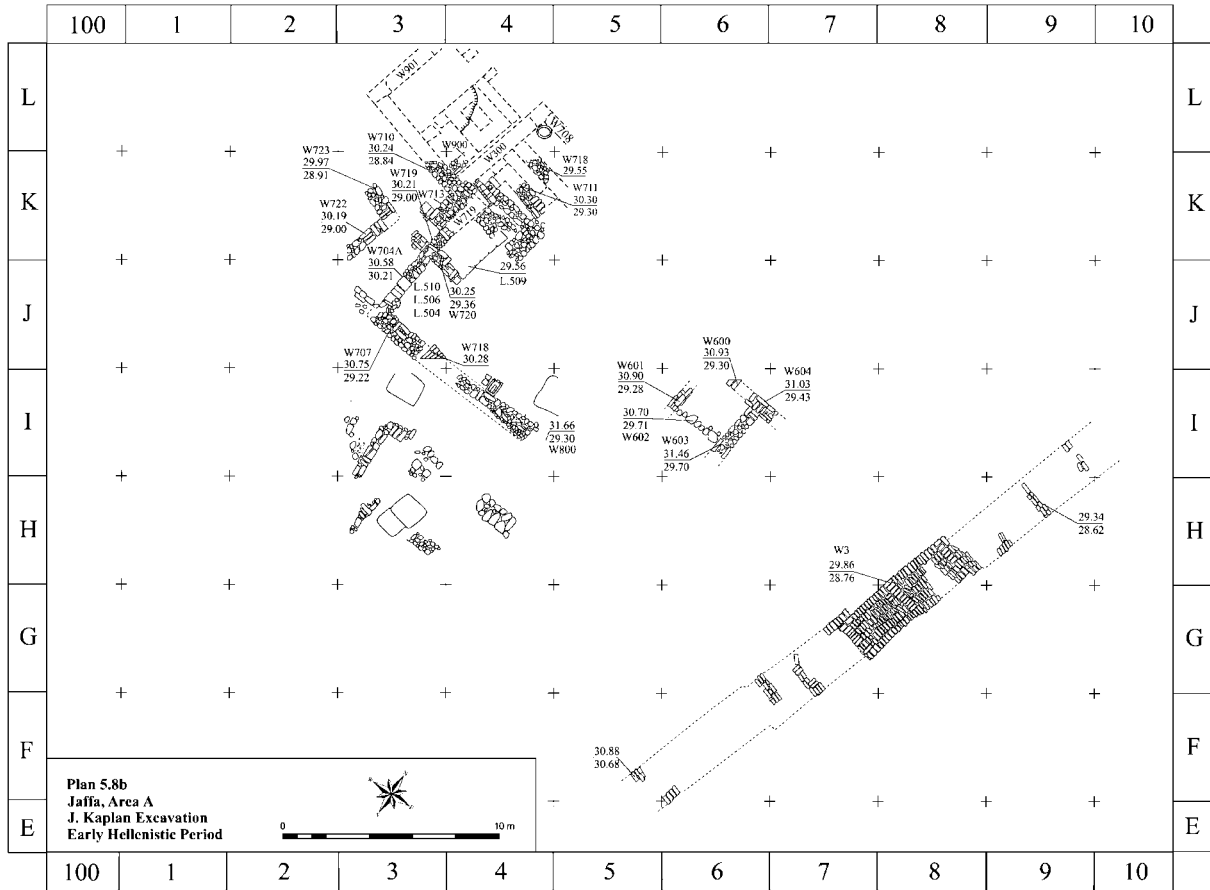


Figure 5.23. The Building M complex, Hellenistic Period.

Phase 5 Late Hellenistic Period (2nd – 1st cent. BCE/1st cent. AD)

The Hellenistic Altar

North of Building M (squares K3–K4; L3–L4) an additional structure was exposed which was identified by Kaplan as a Hellenistic altar (Figure 5.17; Plan 5.2, 5.8). The Hellenistic altar seems to be a late extension of the Building M complex. However, the floor elevation was between 29.42–30.48 m, almost identical to the Hellenistic floor of Building M (L.500a). According to the existing drawing, the structure was exposed in squares L3, L4, K3, K4, where it was attached to the eastern part of Building M. The walls were built in the same orientation of Building M and at a defined point even exploited some of Building M’s walls, which had gone out of use (Plan 5.8): W.710 used the early Building M’s W.710 and W.710a used W.719.

³⁴ Ritter-Kaplan 1982:64. This floor can be associated with her observation that there was a large amount of Attic pottery exposed above a single room floor, all of the same type, decorated with identical Red Figured decoration that may be proof of mass production. However, the documentation of that floor was probably damaged since the associated pottery was dated to the 6th until the early 5th century BCE.

³⁵ Kaplan (1972b:17) notes that among the many distinguishable fragments of Attic pottery an Attic lekanis lid was found. The lekanis lid was identified as belonging to the Attic coarse-style ware, dated to the 2nd of the 4th century BCE; Ritter-Kaplan (1982:66) mentioned that these four lekanis fragments were found scattered above the stone floor in Room 10. Unfortunately, these fragments were not located, except the drawing and photos of four fragments of a single lekanis lid. In addition, the Attic pottery assemblage mentioned by the Kaplans could not be identified.



Figure 5.24. The altar, looking east. Kaplan Archive.

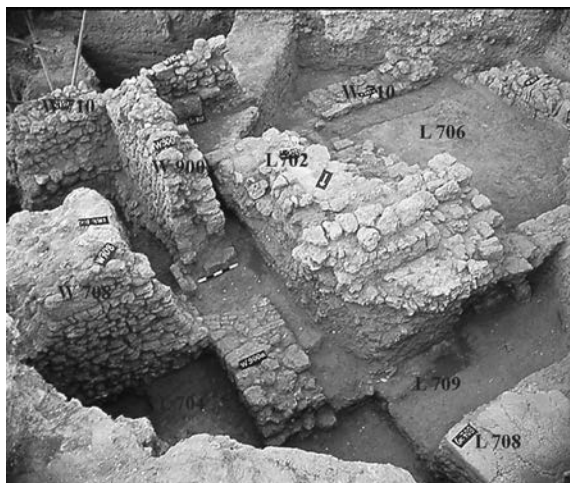


Figure 5.25. The altar, looking south. Kaplan Archive.

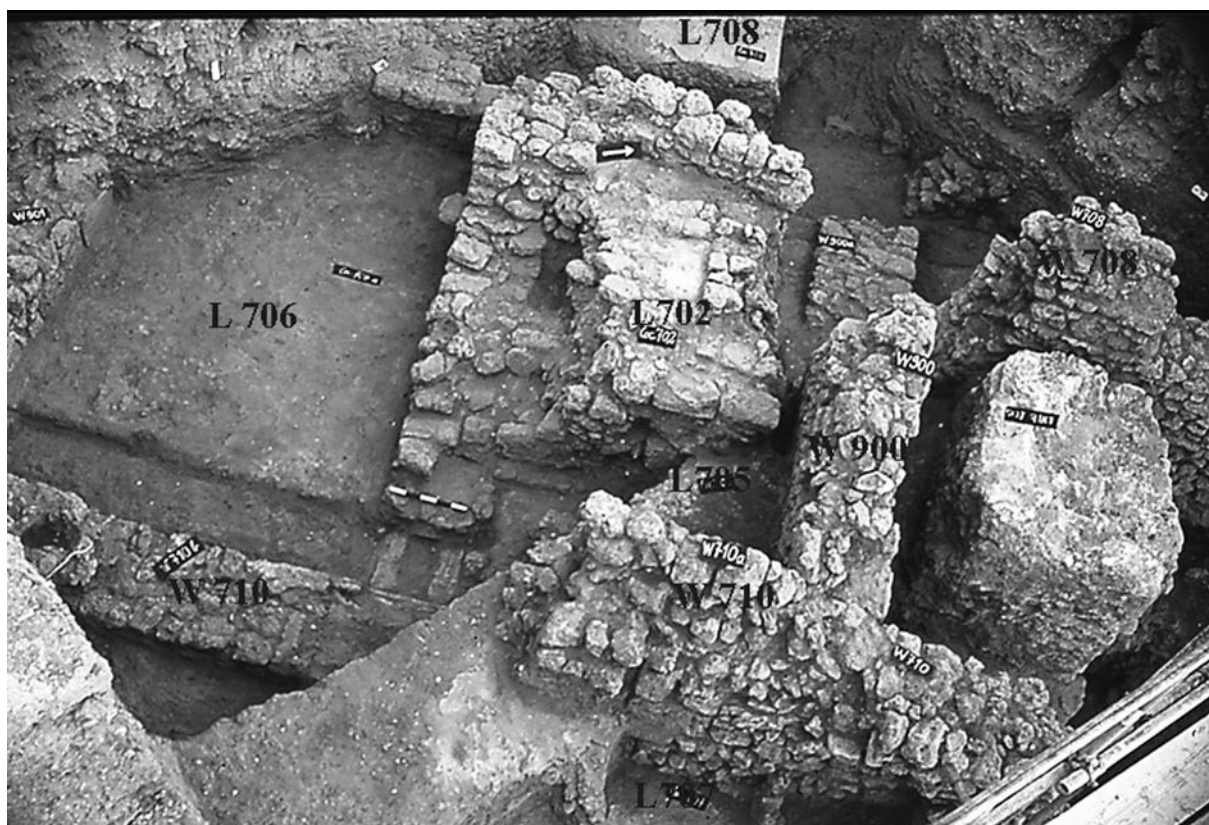


Figure 5.26. The altar, looking north. Kaplan Archive.

The altar was built of wide rubble walls as a squared stone podium, measuring 2.4 x 2.4 m and 60 cm height (L.702). Two oblong plastered depressions appeared on the upper part of the surface (Kaplan 1972a:9). An open courtyard was attached to the Altar western wall (L.706). The courtyard floor was at a level of 29.42 m and was enclosed by walls on the west (W.901) and south (W.710). The entrance appeared to be on the north side (Figure 5.17–5.19). The associated pottery dated the courtyard occupation until the Hellenistic period. The courtyard (L.705) was enclosed by walls, W.710 on the south and W.900 on the east. The altar was located to the west of the entrance (Locus 702). Unfortunately, the pottery associated with the courtyard was not found among any of Jaffa's extant collections. North of the altar was a floor made of lime and kurkar (elev. 30.48 m. ASL) (Locus 709). The floor was attached to the altar's northern wall. The associated pottery was dated from the 2nd until 1st century BCE. East of W.900 (Locus 704) appeared another floor with no datable material, at a height of 30.94 m ASL.

Phase 4: Late Roman– Byzantine period

The Byzantine Mosaic Floor

The mosaic floor was exposed between the “Arab building’s foundations” during the 1956 season of excavation (Kaplan 1956a:193). As in many other cases, the floor location was not recorded and there is no information concerning the floor’s loci and/or squares. The floor segment displays a white mosaic with a black geometric pattern consisting of a row of black squares with concentric diamond patterns, two diamond patterns at the conjunction of the square upper sides, and a triangular pattern at the lower conjunctions (Figure 5.26). The pottery which was recorded on tags as being associated with the mosaic floor was dated from the Hellenistic to the Late Byzantine period.

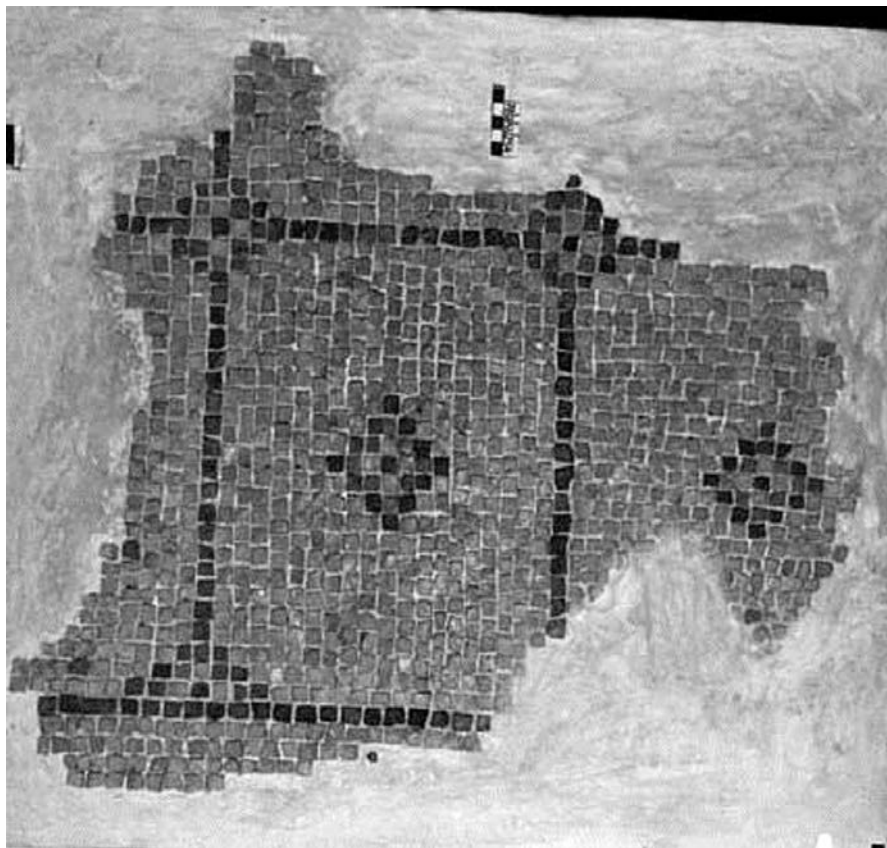


Figure 5.27. Restored fragment of the mosaic floor. Kaplan Archive.

A Pool and Refuse Pit – Indications for a Late Roman–Byzantine Occupation in Area A

A large plastered pool was exposed during the 1972–1973 excavations in the area of the southern rampart of the Jaffa Bronze Age fortifications (Plan 5.9). The surviving evidence concerning the excavations consisted of a photograph (Figure 5.21) and draft illustrations.

Kaplan wrote in the preliminary publication of the 1973 season:

“Of special interest is the large well plastered tank ... especially since the abundant finds from it are relatively well preserved. Its beginning was in the 1st century BCE, when it served as a water tank for the public building that must have been nearby; its later use was apparently as a clay settling tank for a pottery workshop or workshops... the upper silt layer pottery dated to the 4th century CE” (Kaplan 1974a:52).

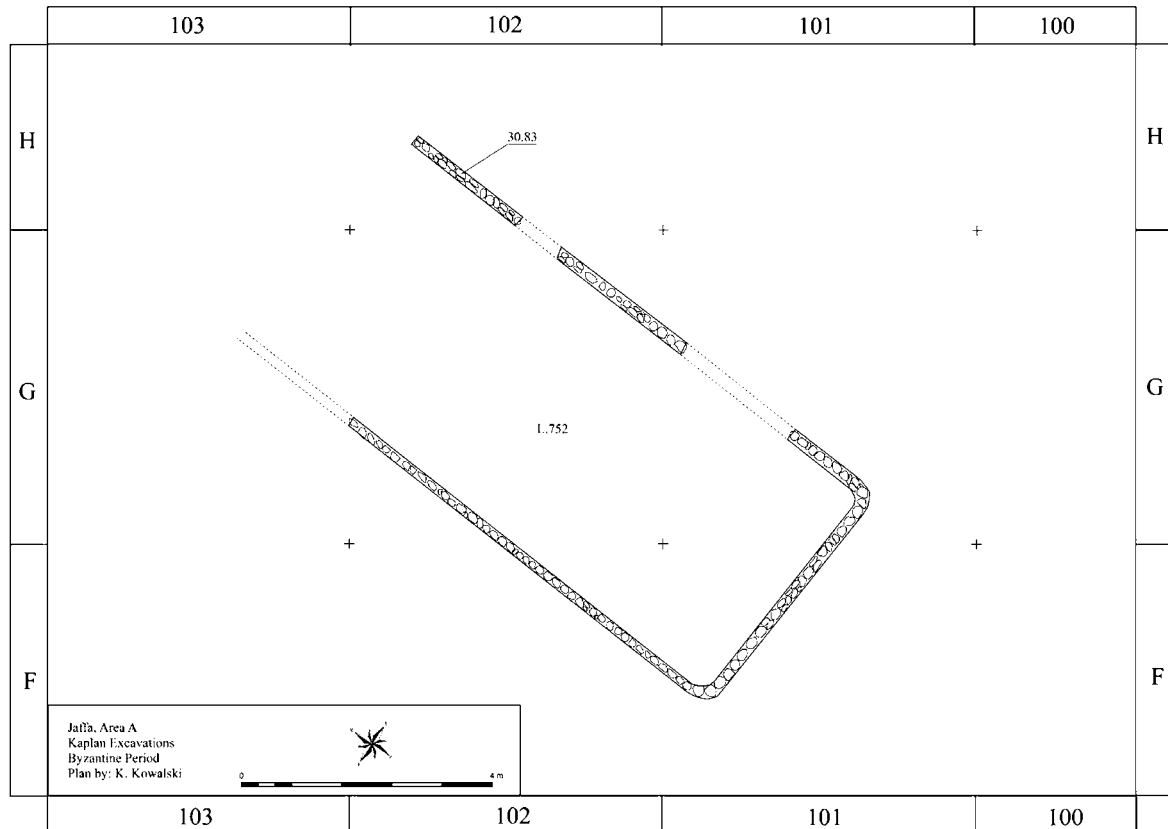


Figure 5.28. The Pool. Jaffa Cultural Heritage Project.

The main information regarding the function and chronology of the pool is the vast quantity of finds. The position of the pool within the general Jaffa grid can be learned from a single graphic diary dated to July 1973. The pool was located at a short distance from the city gates and the Lion Temple, within squares F101–F102; G101–G103 (L.752 and L.753). Kaplan noticed the numerous pottery vessels, especially jugs, which were found at the bottom of the clay layer (Kaplan 1974a:35). It is not clear if the clay layer was rain silt or clay silt for pottery manufacture. However, this assemblage (L.752) contains a huge amount of pottery and other small finds, mostly dated to the Late Roman–Byzantine periods. This evidence complements Kaplan’s preliminary report. Some of the vessels were found intact. However, the varied collection of items found in the pool is very typical of refuse pits and includes utilitarian vessels as well as a storage container and tableware. The most characteristic pottery types in L.752 were dated to the Late Roman–Byzantine periods such as local cooking ware, utility ware including basins, mortaria, jugs and juglets, as well as local storage jars and amphorae. The tableware was very typical for a residential dwelling and included a huge quantity of African Red Slip bowls as well as lamps. In addition to pottery, other small finds typical of a normal household during the Roman period such as bronze key rings, bronze and silver rings and glass vessels were recovered. Of special interest is part of a carved tablet with an erotic scene [No. 12.43]. The tablet belongs to a large group of bone and ivory carved pieces which were especially common in the Late Roman period.



Figure 5.29. The plastered pool. Kaplan Archive.

Conclusions

The historic background of Area A should be remembered. The Building M complex was located in the sacred part of the Bronze Age citadel and above the Lion Temple. Usually, a sacred area preserved its sanctity and holiness throughout time. However, the evidence points toward a dramatic change in designation from sacred to civil area. The nature of the Building M complex within Area A context is unclear. The existence of an altar or some other ritual installation is suggestive of its function as a palace, some kind of royal building, or a temple as was suggested before by Kaplan (Kaplan 1972a:9; 1972b:18). However, on the floor of Building M the remains of an iron workshop were exposed and the building was identified by Ritter-Kaplan as a Sidonian warehouse.

In order to understand the purposes and functions of the architectural remains in Area A we should turn to the regional sources of inspiration. These building remains are characterized by the common Phoenician architectural tradition. The tower as well as the Persian wall preserved Phoenician masonry. The structures were made of locally dressed kurkar ashlar that were most characteristic of the local architecture throughout the coastal plain from the Persian to the Late Hellenistic period.³⁶ The main difference between the building technique of the Jaffa structure and other Persian coastal plain buildings was the transition from limestone to the local kurkar stone (Stern 1977:225). The northern coastal sites were settled by Phoenician inhabitants (Kaplan 1970b:201; Ritter-Kaplan 1982). The regional distribution was not limited to the area between Tell Sukas in the north and Ashdod at the south and the Sharon region (Sharon 1987:37, fig. 8). The Jaffa building technique was no doubt an additional proof for the Phoenician influences upon the culture of the coastal plain.

Building M complex was built in the ashlar pier-and-rubble wall technique which was common in Israel since the Iron II and became quite common throughout the northern coastal sites during the Persian–Hellenistic periods (Van Beek and Van Beek 1981; Elayi 1996; Stern 1995:92–93, photo 5.52; Sharon 1987:27–28,

³⁶ Stern 1977:8–27; 1978:71–75; Elayi 1980; Van Beek and Van Beek 1981; Shiloh 1979:114). Ashlar architecture has been the subject of much research discussing sources for its inspiration. The ashlar technique already appears in Iron Age architecture. However, it is still uncertain whether the Phoenician tradition or if a local Iron Age tradition was its prototype.

fig. 2:d1–3). Jaffa had been considered as the southernmost site in Israel featuring this building technique (Stern 1998:69). However, recent publication exposed architectural evidence from Early Hellenistic Ashdod, the Persian structure in Yavneh-Yam and apparently also in Ashkelon and Gaza (Tal et al. 2005:272). The source of inspiration in Jaffa was the Phoenician architecture as the distribution map indicates (Elayi 1996 fig 4; Stern 1987:257–258).

The exceptional similarity between the architectural situation of Building M and another building in Tel Ya'oz also contribute to the interpretation of Building M. The building at Tel Ya'oz was built on top of a dune layer (varves stratum) and was dated to the Persian period (5th century BCE). The wall was divided into equal units of rubble wall (1.5 m long) with alternating piers built of kurkar ashlar with low and delicate dressed edges, laid down in the header-stretcher technique (Fischer et al 2008:129). As mentioned above, Building M was erected above the varves stratum. In addition, W.800 section (Plan 5.4) and the isometric plan of Building M (Ritter-Kaplan 1982:64–65) present a similar building technique. The structure at Tel Ya'oz was interpreted as a typical private courtyard-house enclosed on four sides by attached rooms. This courtyard-house is a common type of private house in Israel and in the Levant from the 2nd millennium until our days (Stern 1973:56–57; Hirschfeld 1987:26–40). The delicate block dressing at Tel Ya'oz was defined as typical of the Jewish stonemason work (Fischer et al. 2008:134; Shiloh 1979:61–63).

The plan of Building M is not as clear as that of Tel Ya'oz. However, the architectural and chronological circumstances at Building M, Tel Ya'oz, and Dor seem quite equal. Both sites yielded similar Phoenician-style houses built above a layer of abandonment. Stern raised the question what happened to Dor in the interval between the Iron Age and Stratum IV (720–630 BCE), but had no clear answer. The city was not destroyed but Stern cannot determine whether the site was settled (Stern 1995:272–273). This question is relevant also for other coastal sites since during that period of time Jaffa as well as Tel Ya'oz, were abandoned and covered with a layer of sand. Dor was rebuilt in an entirely new plan under the rule of Darius I (520–490 BCE) (Stratum IV, 520–375 BCE) (Stern 1989:117–118). The historical sources confirmed that during the 5th century all the empire underwent a total reorganization and the commercial management of Dor and Jaffa were transferred by the Persians to the Sidonian king (Stern 1995:272; see Introduction p.2). It is reasonable to suggest that after a period of abandonment as a result of the Persian occupation, Jaffa as well as Tel Ya'oz and other coastal sites were revived during a new period of prosperity.

The occupation phases of Building M can be dated from Late Persian period. The building was erected above the varves stratum during the 5th century BCE. The building probably functioned as a dwelling or as a storage facility, and was apparently destroyed during the late Persian period. The exposure of many Persian winged arrowheads in association with floor L.500a could be a clear indication for this destruction event. Winged arrowheads were very common at Persian sites in Israel as well as in Armenia, Anatolia, Persia, Mesopotamia, and Egypt. They were used in our region until the 4th century BCE. Metal arrowheads were mentioned by Ritter-Kaplan in connection with the Egyptian revolt against the Persians during the 4th century BCE (Ritter-Kaplan 1982:64). Winged arrowheads were also found at other coastal sites such as Tel Michal, Akko, Tel Megaddim and Ramat Hanadiv. They appeared in Persian destruction phases, probably connected to the revolt against Persian control over Israel (362 BCE, 351 BCE). During these years Sidon lost its hegemony, and Jaffa as well as other coastal sites were retained under Persian direct control until the campaign by Alexander the Great in 332 BCE. During the revolt of King Tennes of Sidon, many coastal Phoenician sites were destroyed by the Persian ruler Ochus/Artaxerxes III (351–345 BCE). For example, destruction phases were identified in Tel Megadim, Dor, Tel Mevorakh, Apollonia, Tel Michal, and Tell Qasile which can be related to the 4th century BCE (Roll and Tal 1999:213). These sites were reoccupied shortly after the destruction. The appearance of winged arrowheads above the floor of Building M can verify the same process in Jaffa, even though no destruction layer was discovered there.

Following the Sidonian revolt, Building M went through some changes such as the addition of the Hellenistic altar and the appearance of iron manufacturing activity Building M. These two elements do not seem to be related to each other. In addition, the material evidence is too vague to reconstruct the complete stratigraphy. However, the overall impression is that the altar was built above the northern part of Building M following the functional changes that occurred. These changes appeared in the Hellenistic period, probably during the 2nd century BCE. Building M was turned into an iron workshop while the newly built altar served some kind of sacred ritual. A completely different interpretation that can be considered but has no evidence is that the altar was actually part of the Hellenistic smithy. However, the appearance of pottery and other

small finds in association with the floor attached to the altar (L.709) and next to W.708 (L.704) supports the assumption that the building was occupied until the 1st century BCE. The Building M complex continued to be used throughout the period following the conquest of the country by Alexander the Great until the 1st century CE.

Concerning the pool and according to the assemblage represented we can accept Kaplan's theory regarding the history of the pool. It was part of a building complex that functioned probably until the Hellenistic period as a water tank or a clay settling tank for a pottery workshop. Sometime during the Hellenistic period the pool fell into disuse and was turned into a refuse pit. The earliest finds within it were late 2nd to 1st century BCE stamped handles of Kos and Rhodes amphorae.³⁷ The appearance of an enormous quantity of imported African Red Slip ware next to the utilitarian ware would reflect the foreign nature of the inhabitants in Jaffa during the Late Roman and Byzantine periods. The similarity between the pottery within the pool and the types that were manufactured during the Roman period in the Binyanei Ha'uma pottery kilns raises the question: Did the Tenth legionary soldiers stay in Jaffa? It seems that such a possibility must be taken into account in further research. According to the finds, the refuse pit continued to function until the Byzantine period.

³⁷ "A treasure of 300 coins was discovered in the corner of one of the Roman buildings. Next to the coins were found broken jugs which served as containers for the coins" (Kaplan 1974a:35). These coins were exposed in Square J100, next to the pool. Out of the 269 coins, 232 were dated to the Roman period (Meir 2000:130 Table 9).

Chapter 6. Area G: Industrial Remains

Orit Tsuf

Introduction

Area G had been excavated as part of the effort to expose the Bronze Age fortifications that had also been unearthed in areas D and B (plan 1.1).³⁸ From 1963 to 1964 excavations were conducted in order to expose more of the Bronze Age fortifications (Kaplan 1963b:18). Two areas were selected: G and D. Area G was located northeast of Area B, while Area D was situated northwest of Area G (plans 1.1, 6.1).

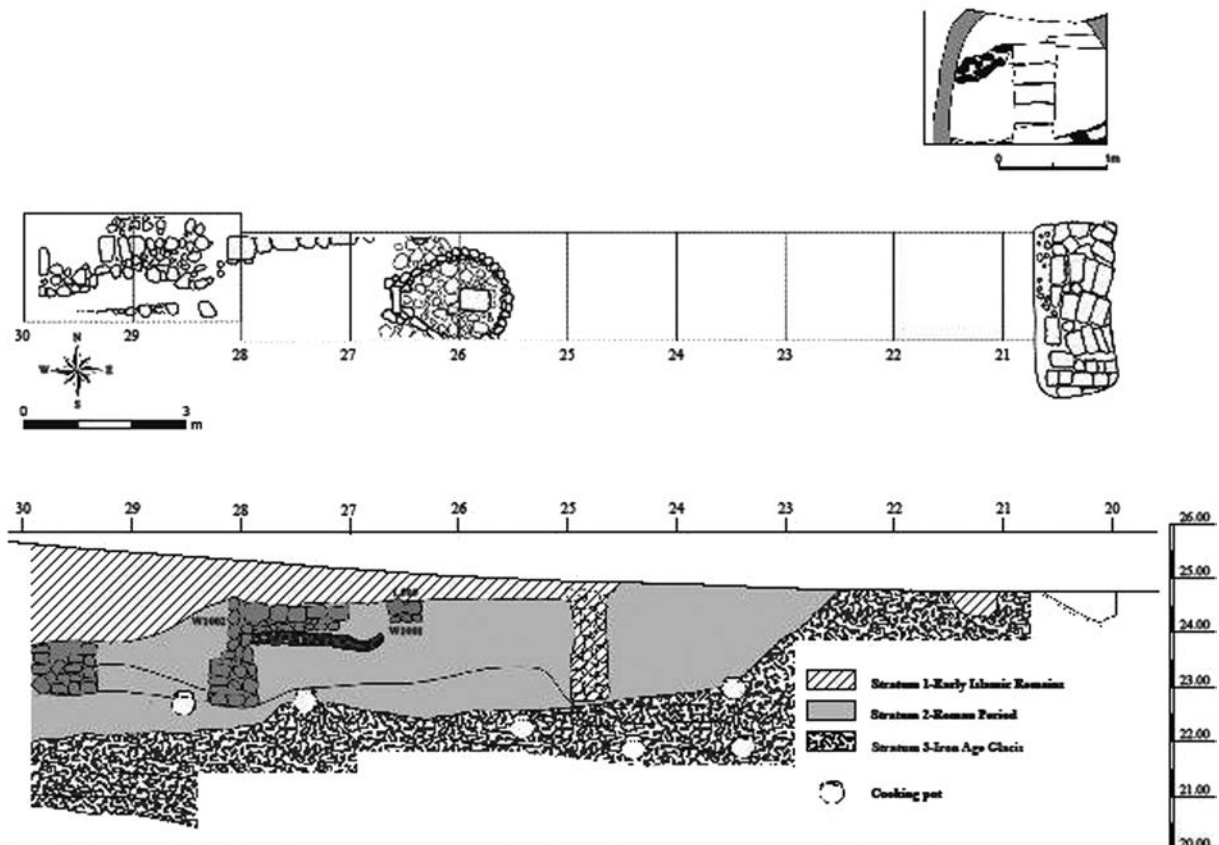


Figure 6.1. Plan and Section of Area G, looking north. Courtesy of IAA.

Area G excavations were conducted during August 1964 (Kaplan 1964b; 1965:11). The surviving documentation includes a notebook and section illustrations. The excavations were conducted in nine squares (squares 20–29) beginning with Sq. 20 at a height of 25.54 m ASL and penetrating downward to the elevation of 20.34 m ASL. The excavated squares 20–29 were located next to the Iron Age glacis, which was oriented north.

Below the surface, Islamic period remains were found (described by Kaplan as “late intrusion”). This stratum contained a stone layer and reached down to 40 cm below the surface in squares 24–29 (Figure 6.1).

The Roman Stratum Red Soil Layers (squares 23–28)

Above the Iron Age stratum (not discussed here) a soil fill was laid down which was described by Kaplan as “red soil Roman.” The Red Soil layers entirely covered squares 23 to 28 (elev. 24.00–22.00 m ASL) and

³⁸ Kaplan 1961:191–192; Keimer 2011:251–259. The Bronze Age glacis was exposed during the 1960 excavations within the Turkish Hammam (Area B).

stretch out over squares 23 to 28 (elev. 22.85–21.10 m ASL). The red soil contained red colored kurkar sand with small stones. At squares 25–26 additional layers of red color soil with small stones appeared below the red soil layer.

The red soil layers can be easily interpreted as a Roman fill that was laid down, according to the pottery, during the 2nd and 3rd centuries CE. The finds from this fill contain Hellenistic pottery as well as a vast amount of 1st to 2nd century CE knife-pared (Herodian) and pseudo Imperial lamps as well as 2nd/3rd century CE cooking vessels. However, some very interesting phenomena were distinguished: next to the typical Early to Mid-Roman coarse pottery, six complete cooking pots appeared within the red soil that date to the 2nd–1st century BCE [Nos. 8.362, 8.363, 8.365, 8.377]. They could have been part of the cooking vessels used by the workers during the process of leveling the area, since all of them were associated with the same layers. However, the early date in addition to the fact that four of them were recorded as if they had been exposed below the red soil fill (Figure 6.1) make that assumption questionable.

The Late Roman Stratum

The Late Roman structures were built into the Roman red fill stratum. At the intersection of squares 25–26 a potter's kiln was exposed (elev. 24.15–23.60 m ASL) (plan 6.1). The rounded kiln (1.75 m. diameter) was built of small size stones (Figure 6.1). Its ceiling was upheld by a central pillar made of squared stones with rounded corners. The pillar (0.4 x 0.4 m, 1.0 m in height) was placed 0.6 m. from the eastern and 0.5 m. distance from the western wall of the kiln. The kiln's fire tunnel was on the southern side (elev. 23.15–23.00 m). The combustion chamber was found filled with stones and burnt red brick from the floor of the firing chamber that had collapsed downwards. On the floor of the combustion chamber a layer of white ash was found (elev. 23.45 m ASL).

The kiln was probably built during the 3rd century CE. Below the kiln floor and in its vicinity some Hellenistic pottery was found that was probably associated with the Roman fill (see above). The latest pottery was dated to the 5th–7th centuries CE. According to the evidence it is reasonable to suggest that the kiln continued to function or at least remained open until the Late Byzantine period.

Exposure of an ashlar wall (W.1002) oriented north-south began in the western part of Sq. 27. It was preserved to a height of 0.80 m and continued toward squares 27 to 29. An ash layer appeared in squares 26 and 27 below W.1002. The pottery associated with W.1002 dates to the 3rd century CE. In the eastern part of Sq. 26, below an Islamic W.1001, a tabun was exposed (L.500) at an elevation of 24.75–24.45 m. ASL. Its diameter was 1.22 m and it can be dated from the 2nd to the 4th century CE. Both W.1001 and the tabun were dismantled.

Conclusions

Area G can be considered as a glimpse into a zone in Jaffa probably associated with the industrial activity of the town. The designation of the area as an industrial area was established in the Roman period and continued throughout the Late Byzantine period. The Roman period saw major maintenance activity in Area G. The 1 m layer of red soil that contain pottery from the Hellenistic to the Late Byzantine period may be proof for a long-lasting period of occupation in this area. W.1002 is probably fragmentary evidence associated with the activity in the area during the Roman period. The kiln remains strengthens the assumption that Area G was part of a pottery manufacturing center during the Roman and Byzantine periods. The relatively numerous cooking vessels in relation to the small excavated area seems to be an indication of the primary activity in Area G. The fact that the cooking ware types found in the kiln vicinity are rare at other sites can be additional proof for being of local manufacture. The industrial zone can be dated according to the pottery assemblage from the Roman to the Late Byzantine periods.

Chapter 7. Area T: Hellenistic to Byzantine Graves

Orit Tsuf

Introduction

Area T is located on the northern side of Jaffa's Clock Tower Square. The excavation was conducted, according to the bucket tags, "in the prison" (i.e., Police Station), known during the Ottoman period as the *Kishle*, during the two seasons. In November 1961 eight graves were uncovered dated to the Hellenistic period, while in the following season in March 1962 six more graves and a single pit were discovered dated to the Hellenistic and Roman periods, in addition to a pit or well (Pit 17). The surviving evidence is the 1961 diaries containing three draft sketches of the skeletons' positions inside the graves. Work in this area began as a salvage excavation along the water pipe's course (Kaplan 1963b:10). Grave 1 was described as cut into the kurkar bedrock, while the technique used for the other graves was not mentioned in the diary. No records exist for the 1962 season, and the main evidence is derived from the pottery and other small finds located in the Jaffa Museum's storage rooms (Figure 7.1:1–21). The two seasons of excavations will be described below. However, due to the fact that only the 1961 excavations were recorded, it will be described in detail (Table 7.1) while the second season will be discussed in relation to the finds (Table 7.2).

Tomb	Str.	Bucket	Location	Description of finds from notebook	Period
1	3	1–4	20 cm above the floor	Pottery sherds, nails, figurine, stone vessel	3 rd –2 nd /early 1 st BCE
		5	The floor		3 rd –2 nd BCE
2	4	6	20 cm below Tomb 1		
		7	Within the tomb	Hellenistic pottery	Early Hellenistic
3	4	8	20 cm above the tomb	Hellenistic pottery	Early Hellenistic
4	4	9	Within the tomb, near the legs	Almost complete cooking pot and pottery sherds (not found)	
5	3	10	Near the head	Complete plate (not found)	3 rd –2 nd /early 1 st BCE
6	2	11		Two large vessels without rims	Roman or later?
7	3	12	10–50 cm above the tomb, until the covering stones	Hellenistic pottery	Early Hellenistic
		13	10 cm – until the covering stones		
		14	Arabic pit (no. 8)	Late Islamic pottery	
10		15	Within the tomb	Almost complete cooking bowl (Byzantine–Early Islamic) and early "Arabic jar" (not found)	Byzantine–Early Arabic?
		16	Collected pottery		

Table 7.1. 1961 pottery bucket information with reading of period.

Tomb	Bucket	Location	Description of finds	Period
14	1		Pinched Persian lamp; Black Glazed <i>kantharos</i> rim; ETS A sherds; bag-shaped jar with ridged neck (1 st CE) [no. 8.618]; bag shaped jar with shelf rim (1 st –2 nd CE)	4 th BCE – 2 nd CE
	2		Bag shaped jar with shelf rim (1 st – 2 nd CE); Phoenician jar (1 st BCE–1 st CE) and late Hellenistic cooking pot [no. 8.371]	2 nd BCE – 2 nd CE
16	20		1 st century CE pear shaped glass bottles [no. 11.68]	Early Roman
18	9,8		Local Red Slip <i>skyphos</i> [no. 8.96], and Roman cooking pots (1 st –2 nd CE) [nos. 8.395, 8.411]	Hellenistic – 2 nd CE
21	11	20 cm above the stone floor	Fusiform and piriform bottles [nos. 8.200, 8.215–8.217, 8.219]. Bottle [no. 8.200] was found inside an amphora [no. 9.59].	1 st –2 nd CE
101			Piriform bottle [no. 8.218]	Early Roman
20	16		Roman jar sherds which were discarded	Roman?
	10	Out of tomb, above the huge jag?	Late Roman miniature jar [no. 237]	Late Roman
			Late Roman wine glass (6 th –7 th CE) [no. 11.115] and indented jar (3 rd –4 th CE) [no. 11.98]. Two gold Roman earring [nos. 10.37]	Late Roman – Byzantine
Pit 17	4		Table amphorae rims, Hellenistic local Red Slip fish plates	Hellenistic
	19	Bottom of well	Shelf rim of deep bowl/basin	
	6		Table amphora rim; amphora rim; small local krater (Similar to no. 8.280); small fragments of ETS A	Early Hellenistic – 2 nd CE
	7		Small local krater (similar to no. 8.280); Kos amphora; spherical juglet bases; fusiform bottle; Black Glazed bowl; large local Red Slip incurved rim bowl	Early Hellenistic
	11	Below floor level, within the well	Local Red Slip incurved rim and out-curved rim bowls, fish plate; local incurved rim bowl [no. 8.13]; Rhodian stamped handles (244–236 BCE) and Thasos stamped handle (258–249 BCE)	Hellenistic
	5		Table amphora rim; local Red Slip fish plate; incurved rim bowls	Hellenistic

Table 7.2. 1962 pottery bucket information with reading of period.

The 1961 Season

Grave 1

The rectangular cist grave was cut in the kurkar bedrock, about half a meter below the surface. Two human skeletons were discovered within the grave, lying down in a “head to head” position. The skeletons were placed on their right side with bended legs. Near the legs a number of stones were arranged in the shape of a dome.

The grave was filled with a layer of brown soil mixed with Early Hellenistic finds. A Hellenistic local Red Slip *skyphos* was found on the floor of the grave (Figure 7.1:1). In addition Late Hellenistic local Red Slip bowls were exposed 20 cm above the floor (Figure 7.1:5–8). In the same assemblage the head of a zoomorphic figurine was discovered, dated to the Early Islamic period.

Grave 2

Grave 2 was uncovered below the eastern part of Grave 1. According to Kaplan’s sketch, the grave was cut into the kurkar bedrock. A single skeleton was discovered in it. Due to careless excavation and probable s from Grave 1 most of the pottery found within Grave 2 was broken. The pottery dates to the Early Hellenistic period.

Grave 3

Grave 3 was exposed north of Grave 1 and was similarly arranged as Grave 2. The skull of the skeleton was turned towards the west. The grave was covered with kurkar or building stones in secondary use. The pottery was dated to the Early Hellenistic period.

Grave 4

Grave 4 was uncovered below Grave 3. The skull of the skeleton was turned towards the east and upwards. The arms were in a crossed position over the chest. Hewn kurkar stones were irregularly placed upon the grave. Kaplan noted in his diary that “an almost complete cooking pot and pottery sherds” were exposed, however they were not found in the storage rooms of the Jaffa Museum.

Grave 5

The skull of the skeleton was turned towards the east and upwards. Early to Late Hellenistic pottery was found near it (Figure 7.1:2, 4). Hewn kurkar slabs covered the grave in which an Early Hellenistic figurine of a female holding a flower at her breast was found [No.14.15].

Grave 6

Grave 6 was a secondary burial grave. The human bones were buried inside two large vessels without rims. These vessels was not found in the Jaffa storage rooms, however, they were probably amphorae in secondary use which served as containers for the bones.

Grave 7

Grave 7 was uncovered near Grave 5. The skull was turned towards the east and upwards. The arms were in a crossed position over the chest. The grave was covered with large kurkar stones in secondary use. The “Arab pit“ (Pit 8) dug into the lower part of the grave near the skeleton’s legs. Fragments of an Early Hellenistic local Red Slip bowl were found within the grave.

Grave 10

The skull was turned towards the east. One stone was placed on the skull and another on the legs. The grave was covered with large kurkar stones above which large Early Islamic vessel (?) was discovered. Inside the grave an “almost complete Byzantine or Early Islamic (?) vessel (cooking bowl)” was found. These two vessels were never identified in the Jaffa Museum’s collection.

Conclusions

Kaplan divided the graves into three levels (levels 2, 3 and 4). He did not clarify his division, thus the proposed division did not contribute to the interpretation of the stratigraphy and chronology of the various graves. The finds within the graves, however, seem to be very uniform and consistent with local burials of that period. Graves 1, 2, 3 and 7 can be dated to the Early Hellenistic period while Grave 5 is Hellenistic and Graves 4, 6 and 10 are not datable.

The most typical bowl in the graves was the small krater made of semi-fine light ware (Figures 7.1:3–4). The small krater-type bowl was very common in Hellenistic graves (Graves 1, 2, 3, 5) even though it was not common at other Hellenistic sites. This type of bowl was made of local porous ware which was most probably manufactured in the Jaffa pottery production center and served the needs of the city inhabitants during funerary rituals. The local Red Slip bowls were the second most common pottery type found in the graves. They included several *skyphoi* (Figure 7.1:1–2), as well as many bowls of various sizes and shapes (Figure 7.1:5–8).

Among the most interesting finds was the figurine fragment displaying a female hand holding a rosette close to her chest, dated to the Early Hellenistic period [No. 15.15]. This fragment, whether a bust or a figurine, most likely depicts a goddess or a votary, similar to the many bearers and dedicators from the temple of Demeter and Kore on the Acrocorinth (see chapter 15, pp. 580–581).

We have no finds from the Graves 4 and 6. However, according to the notebook, two large jars with human bones were found in Grave 6 which were dated as “Roman or later”? None of them were found in the Jaffa Museum.

Grave 10 was dated from the Byzantine to the Early Islamic period. A complete Gaza jar dated to the Late Roman period [No. 8.660] was found in Area T. Its context is unknown, and it can only be assumed that it was the one described by Kaplan as a “large Early Islamic jar.”

The 1962 Season

Six graves and a pit or a well were excavated during the March 1962 season. The material evidence is limited and unsatisfactory since no documentation appears to have survived. The study and interpretation of the finds were based upon the written records on the bucket tags (Table 7.2).

Graves 14, 18, and Pit 17 may be dated from the Hellenistic to the Mid-Roman periods. Graves 16, 21, 101 were dated to the Early Roman period and Grave 20 to the Late Roman–Byzantine period.

The finds in the graves were distinctive of Hellenistic and Roman middle class inhabitants living in a typical port town. The pottery was of local production but of a high quality (Figure 7.1:9–15). In addition to the pottery a stone bowl was found [No. 12.41], which was in common use at every household. In Grave 20 two gold Late Roman earrings were found (Figure 7.1:20–21) as well as a nearly complete wine glass (Figure 7.1:19). Their appearance in the grave can confirm the high social class of the deceased. Most interesting was the complete Africana Granda IIA amphora dated from late 2nd to early 3rd century CE (Figure 7.1:16) as well as the Hellenistic Italian Dressel 1 amphora body and base fragments. Both could have been used in secondary use as burial vessels.

The discovery of the graves in Area T is clear evidence that this area was an ancient cemetery. Recent IAA salvage excavations near the Clock Tower Square and in the Qishle (Police Station) Compound confirm this observation (Arbel 2009). The discoveries presented in this chapter are crucial proof that a cemetery was already in use there from the Early Hellenistic until the Early Islamic period.

No.	Reg. No.	Tomb	Bucket	Description	Period
1	79/T/61/037	1	5	Local Red Slip <i>skyphos</i>	3 rd –early 1 st BCE
2	76/T/61/005	5	10	Local Red Slip <i>skyphos</i>	3 rd –early 1 st BCE
3	79/T/61/043	Unknown		Local krater	Early Hellenistic
4	79/T/61/006	5	10	Local krater	Early Hellenistic
5	79/T/61/040	1	2	Local Red Slip bowl	2 nd BCE
6	79/T/61/041	1	2	Local Red Slip fish plate	2 nd –early 1 st BCE
7	79/T/61/046			Local Red Slip bowl	2 nd –early 1 st BCE
8	79/T/61/042			Local Red Slip bowl	2 nd –early 1 st BCE
9	79/T/62/019	21		Fusiform bottle	2 nd BCE–1 st CE
10	79/T/62/020	21		Piriform bottle	1 st BCE
11	79/T/62/022	21(?)	103	Piriform bottle	1 st BCE–1 st CE
12	79/T/62/021	21(?)	11	Piriform bottle	1 st BCE–1 st CE
13	79/T/62/015	20	10	Miniature cup	Late Roman
14	79/T/62/053	14 (?)	2	Flared neck cooking pot	2 nd –1 st BCE
15	79/T/62/012	18	9	Hammer Head Rim cooking pot	2 nd –3 rd CE
16	79/T/62/018		12	Africana Granda IIA amphora	Late 2 nd – early 3 rd CE
17	79/T/62/008	16	20	Pear-shaped bottle	1 st CE
18	79/T/62/017	20		Wine glass	6 th –7 th CE
19	79/T/62/016	20		Glass-indented jar	3 rd –4 th CE
20	79/T/62/014	20		Gold earring	Roman
21	79/T/62/013	20		Gold earring	Roman

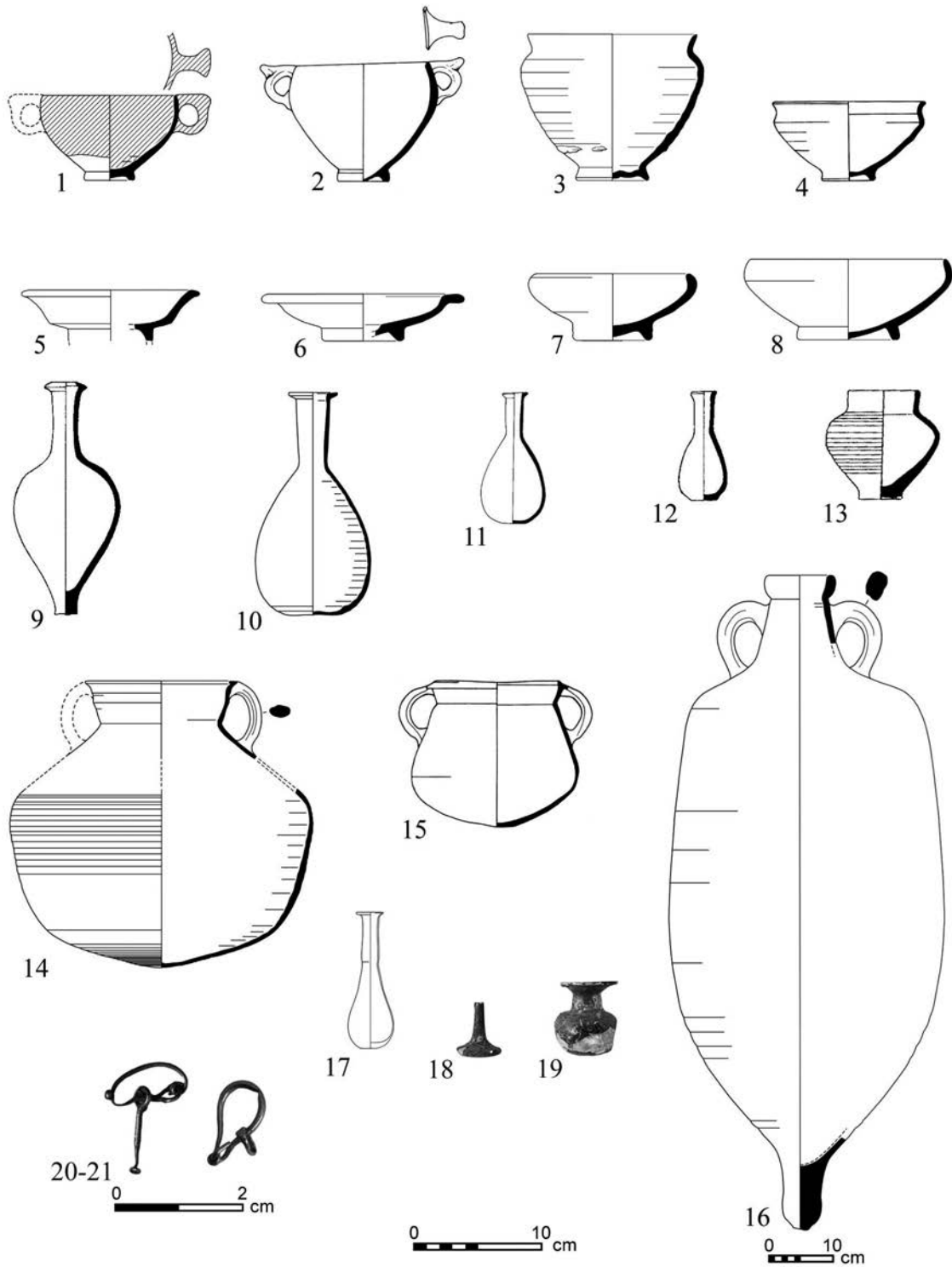


Figure 7.1. Selected finds from graves excavated in Area T, 1961–1962.

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PART II: POTTERY AND OTHER SMALL FINDS

Chapter 8. Introduction

Orit Tsuf

The primary aim of the artifact catalogs is to establish a typological-chronological corpus of the finds recovered from Kaplan's excavations in Jaffa in the years 1955 to 1982. The finds hardly represent the assemblages uncovered in the excavated areas, dated from the Persian to the Byzantine periods. Therefore, the catalogs include as well items from unrecorded areas that were not presented in the first part of the study. The finds were exposed in the areas listed in Table 1.

The condition of Kaplan's excavation records did not permit the development of a complete chronological study of Jaffa's finds. A considerable number of finds remain with unknown provenances, often lacking either loci and/or bucket numbers. Particularly regarding the earliest excavation seasons (Area A, 1955–1958), it is often only possible to discern a reference to squares from the finds that were recovered. As a result of this situation I decided to focus on the creation of a comprehensive typological corpus of Jaffa's assemblage that would provide additional angle to the rather incomplete picture that was presented in Part One. Both parts of the study may enable the reconstruction of Jaffa's stratigraphy according to the finds recovered from Kaplan's excavations. This approach permits not only the eventual integration of these finds into future efforts to reconstruct Jaffa's history from Kaplan's excavations and those of other expeditions, but will also create a typological basis for artifacts from future excavations in Jaffa. Its principal contribution will be the identification of forms and types of the Persian to Byzantine periods that appear to be unique to Jaffa, which have not been previously studied. The finds presented in the following catalogs are the prototypes of each artifact category recovered from Jaffa's excavations. These finds were based on two different data sets: the museum's inventory and the new inventory.

Finds Registered by the Jaffa Museum

More than half of the items in the catalogs were identified and given preliminary classifications by the former Jaffa Museum Director, Dr. Ivan Ordentlich and his staff. Each item was given an inventory number and a museum catalog was created, which included the artifacts displayed in the museum as well as the best preserved objects. This inventory is based on complete artifacts or sufficiently well-preserved types, and therefore included the most "presentable" and "nicest" finds from Kaplan's excavations. The items were classified in the following manner: 79 (site identification number for Jaffa in Kaplan's site database)/Area (in Jaffa)/Year (of excavation)/object number (e.g., 79/A/61/001).

Newly Registered Finds

The new inventory was established during this research between 2004 and 2009. The main goal of the additional inventory was to complete the old one thus creating a complete catalog of Jaffa's finds. Many "new" artifacts were located, mostly local pottery types and stone vessels that were not defined in Kaplan's time or during Ordentlich's work. The second goal was to locate the finds from loci that were determined to be indicative or significant to the reconstruction of Jaffa's stratigraphy (referred to generally as "sealed loci"). In such cases, the inventory was classified in the following manner: Area/Year of excavation/Bucket number or locus number.object number (e.g., Reg. No. C/61/B444.1). In addition to a registration number, each item received a reference number, a running number within each catalog representing the item within other contexts throughout the manuscript.

The various catalogs in Part Two are the foundational databases for the stratigraphical-chronological studies presented in Part One. Therefore, the recording system served the research needs throughout both parts of the study. Sometimes the finds are referenced two or three times throughout the research. For example, a certain ceramic vessel can be first presented within its original context (Part One), second, in the comparative

discussion (Part One) and thirdly in the pottery catalog (Part Two). Each inventory item included in the catalogs received its catalog number, in order to track its original description and date.

Each of the catalogs is classified first according to types. Each type was dated according to parallels from other published sites. The date of each artifact was added in case the type was recovered in a discernible context. Naturally, the most common category was ceramics, which included more than one thousand types and subtypes. The metal and glass artifacts were the second most common find with more than five hundred metal objects and more than one hundred glass artifacts dated from the Late Hellenistic to the Byzantine periods. The stone artifacts are the most enigmatic assemblage. Apart from the Hellenistic hard limestone common vessels, a rich and variegated assemblage of Judean stone vessels is attested in Jaffa. The bone artifacts as well as the terracotta figurines are fairly limited and characteristic of sites in the Coastal Plain.

All coins were identified and dated by Dr Ariel Donald.³⁹ A discussion concerning Jaffa's coinage repertoire was published following the International Numismatic Congress held at Berlin in 1997 (Meir 2000). The beads and semi luxurions small objects cannot be precisely classified according to types and chronology since such artifacts had long life spans.⁴⁰ Many of these artifacts appear to be Islamic. Others are discussed within their contexts, when these could be reconstructed.

Presentation Method of the Various Artifacts

Each artifact in the various catalogs was recorded following this general manner:

- Catalog No.: General serial number
- Artifact: Type and/or shape
- Reg. No.: According to the new/or museum's categories
- Location: Area; Square (Sq.); Bucket (based on surviving records)
- Description: Shape, inclusions, and color of items (usually Munsell)
- Measurements: Rim diam.; Base diam.; Max h. = Maximum height; all measurements are in centimeters unless stated otherwise.
- Date range: Dates follow references that were discussed in the introduction to each type of artifact. The date according to stratigraphy was defined for finds from recorded contexts.

³⁹ The coin catalog is kept in the Jaffa Museum.

⁴⁰ Maud Spear, personal communication, June 2008.

Chapter 9. The Pottery

Orit Tsuf

The diverse and abundant assemblage of pottery from Jaffa is comprehensive and associated primarily with domestic life. It represents of the pottery assemblage of Israel from the Persian to the Byzantine periods. Its diversity can in many respects compensate for the limited documentation available about Jaffa's stratigraphy, and can shed light upon many unclear aspects of its cultural heritage. A journey through the ceramic types that once surrounded the inhabitants of Jaffa, from the personal table vessels for eating and drinking, to the utility and cooking vessels and storage containers, as well as the imported pottery, will help us understand the rich and diverse character of the city during these periods. For this reason, the main classification of the pottery is based on function. Each functional group was classified according to origin, period, types, and subtypes, but not in the same internal order.

The first three groups are the coarse ware used for everyday life. The first is table and personal vessels, comprising locally produced bowls, jugs and juglets, as well as the typical unguentaria. The second is utility and cooking ware, naturally comprising the vessels used in cooking. The third is the storage containers that are used in every household for food storage. In order to provide a complete picture of domestic aspects of daily life in Jaffa, the above groups were described according to vessel function. The internal evolution of each functional type throughout time is presented as well. The fourth group focuses on the imported ware that mainly includes tableware. The imported vessels were described basically according to source of origin since the main goal was to reconstruct the trade routes to Jaffa through various periods.

The pottery assemblages emphasize the unique character of Jaffa as a port city with direct connections to the hinterland and the Coastal Plain. The tremendous amount of late Persian to Early Hellenistic local red slip ware, for example, emphasizes the close relationship with the neighboring Phoenician coastal cities and confirms the physical and architectural evidence for Jaffa as a typical Phoenician city during these periods. In addition, close relations with other parts of Provincia Judaea during the Roman period and especially with Jerusalem can be presented through the appearance of Judaeian pottery. This phenomenon strengthens the identification of the Jewish community in Jaffa with that of Jerusalem and Judaea (Tsuf 2011:271–290). Most distinct are the large quantities of early and mid-Roman local bag-shaped and bell-shaped jars. However, Jaffa was inspired as well by the Galilee from which the "Northern Kraters" and "Carinated Casseroles" were brought to Jaffa, mainly in the early to mid-Roman period, probably for the use of the Jewish population.

The multicultural nature of Jaffa's population resulted in a uniquely rich assemblage of fine wares, amphoras⁴¹ and lamps. The intense import began, on a small scale, during the late 6th century BCE, with the East Greek pottery. One of the peak periods of imports to Jaffa occurred during the late 4th to 3rd centuries BCE with the appearance of the Attic Black Glazed tableware and lamps. The second and third are connected with ETS A dated to the Early Roman period and African Red Slip ware dated to the Late Roman period. Most interesting and needing further investigation are the Hellenistic pseudo-Attic lamps and the Delphini-form lamps that appeared in large quantities in all areas. These two types were locally produced, probably in vicinity of Jaffa. According to the many pottery kilns dated to mid-Roman and the Byzantine periods recovered in Area C we can conclude that the local pottery was manufactured in Jaffa. For example, Byzantine jugs, arched-rim basins, grooved rim cooking pots and thick flattened rim casseroles.

A general introduction concerning each type is presented before displaying the Jaffa repertoire. When dealing with more distinguished or eminent types a comprehensive discussion was added. The discussions display the research situation, distribution, and origin of each type.

Each type and subtype received a description of its shape, decoration and unique qualities. The most problematic issue was the dating. Due to the lack of secure stratigraphy, as noted above, the chronology of most types was based upon the discussion of distribution that presented the chronology range according to various sites in Israel and abroad. In order to establish the most secure chronology, the discussion on each type was in accordance with its typological development and not with its regional appearance at sites in Israel and abroad. Since the display of the types was paralleled with their sites or, whenever possible, in relation to

⁴¹ The amphorae are discussed in chapter 9. The amphorae stamped handles will be published in a future study.

their Jaffa context, I propose a *Date range* throughout Israel for each item's appearance. Within each type category the most indicative types and subtypes from the Jaffa assemblage were presented.

The finds represented in the catalog received serial numbers from first to last (1192 items in total). For each item the following information is recorded.

1. Museum Registration number (e.g., 79/A/55/001) or new Registration no. (e.g., A/55/B56); see Introduction to Part Two, p. 93).
2. Loci and bucket numbers are included whenever found, as noted in the previous example.
3. Measurement of rim diameter (Rim diam.), base diameter (Base diam.), and maximum height (Max h.).
4. Lamp measurement was the maximum width (Max w.) and length (Length).
5. Description of the shape, decoration, slip, ware inclusion and colors (according to Munsell).
6. Date range of each item according to references and context.

The artifact catalogs are the database for the comparative studies in Part Two and for the stratigraphy discussions in Part One

9.1. Table and Personal Vessels

9.1.1. Bowls, Plates, and Jugs

9.1.1.1. Persian Bowls and Plates

Incurved Rim. Plain rim slightly thickened, steep wall, carinated at lower part, disc base. In Jaffa an early version with a thick heavy base typical of the Iron Age (no. 8.1) was found, as well as large bowls probably with a disc base and rounded walls (nos. 8.2–8.3).

Stern classified that form as Type 2 dated from the late 6th to the 5th centuries BCE (Stern 1982:97, fig. 113). The type is rather rare and appeared in Tel Mevorakh in the mid-5th century BCE (Stern 1978:30, fig. 4:7), Akko (Dothan 1976:26–7, fig. 27:1–2) and the city of David in Jerusalem (Zuckerman 2012:34 fig. 3.2:22–23). No. 1 was found at the Persian level at Tell Ya'oz (Fischer et al 2008:136, fig. 14:3) and the City of David in Jerusalem (Zuckerman 2012:34, fig. 3.2:24–25). Similar examples from the Ma'agan Mikha'el shipwreck, were dated to the end of the 5th century BCE. They are considered to be "Galley Ware" and are meant for sacred offerings rather than for food (Artzi and Lyon 2003:183).

Date range: early Persian

1 Bowl

Reg. No. 79/T/61/045; Area T

Rim diam.: 15; Base diam.: 5; Max h.: 5.5

Incurved rim, sloping wall, string cut base. Light brown ware (7.5YR6/4), many small black grits, hard fired.

2 Bowl

Reg. No. 79/H/68/036; Area H, Bucket 10

Rim diam.: 22; Max h.: 6

Incurved rim, rounded wall. Reddish-yellow ware (7.5YR7/6), hard fired.

3 Bowl

Reg. No. A/71/B357; Area A, Sq. I6, Bucket 357

Rim diam.: 25; Max h.: 5.5

Incurved rim, rounded wall. Very pale brown surface (10YR8/3), light yellowish-brown core (10YR6/4). Many minute white grits, a few small black grits, medium fired.

Carinated Wall

Plain flaring rim, carinated wall and disc base. A single bowl with sharply carinated wall (4) was found in Jaffa. The fabric is coarse with a dark core and internal red slip.

That type of bowl was most popular in the Persian period and was distributed throughout Israel. Their angular shape is an exact copy in clay of a metal bowl common in the Persian period and may have been the continuation of the “Assyrian” bowl type of the previous period. They were classified by Stern as Type 5 dated to the 6th–4th centuries BCE (Stern 1982:97, pl. 115). Several bowls with a more or less carinated wall were recovered from a Persian cistern in Qedumim (Stern and Magen 1984:15–16, fig. 5:4–5). Similar Persian types were also found at Ramat Hanadiv (Silberstein 2000:438, pl. VIII:2), En-Gedi (Stern 2007:199, fig. 5.2.1:5–14) and Jerusalem (Tushingham 1985:34, fig. 13:30, 32; Zuckerman 2012:32, fig. 3.1:6–15). At Tel Keisan, a similar bowl was recovered from the Hellenistic level and was dated to the Seleucid period (Breind 1980:110, pl. 13:28).

Date range: 6th – early 3rd cents. BCE

4 Bowl

Reg. No. 79/Y/68/188; Area Y, Square: Y 3, Locus L–6, Bucket 44

Rim diam.: 16; Max h.: 4.5

Flaring rim, concaved wall carinated at mid wall. Exterior ware pale red (2.5Y7/2) interior ware light red (10R6/7), dusty red core (2.5YR4/2). Many small white grits, medium fired.

Everted Rim

A single fragment was recovered in Jaffa with an everted shelf-like rim (5). Stern classified that form as Type 3 (Stern 1982:97, pl. 114). The earliest example appeared at the Mesad Hashavyahu fortress within an East Greek assemblage and was dated to late 7th century BCE (Naveh 1962:97, fig. 4:3). In Ashdod, Jerusalem and En-Gedi the type was dated to the Late Persian period (Tushingham 1985:34, fig. 13; Porath 1974: 46, fig. 4:4; Stern 2007:199, fig. 5.2.1:26).

Date range: late 7th –early 4th cents. BCE

5 Bowl

Reg. No. A/70/B265.7; Area A, Sq. J3, Locus 510, Bucket 265

Rim diam.: 16.5; Max h.: 2.25

Everted rim, rounded wall. Very pale brown ware (10YR8/3), soft fired.

Deep Wall

Plain pointed rim, vertical wall, disc base slightly convex on underside (6). One complete bowl was recovered in Jaffa. Stern classified that form as Type 4 (Stern 1982:97, pl. 115). In Jerusalem and En-Gedi similar bowls were dated to the 5th–4th centuries BCE (Tushingham 1985:34, fig. 13:30; Stern 2007:199, fig. 5.2.1:16–20).

Date range: 6th–4th cents. BCE

6 Bowl

Reg. No. 79/C/61/419; Area C, Bucket 644

Rim diam.: 9; Base diam.: 5.25; Max h.: 5.5

Plain vertical rim, steep wall, flat base.

Flared Wall

Flared wall ribbed at internal face (7).

7 Bowl

Reg. No. A/72/B29.2; Area A, Locus 704, Bucket 29

Rim diam.: 16; Max h.: 2

Flared rim and wall with internal ribbing.

9.1.1.2. Hellenistic Bowls, Plates, and Jugs

In the Levant and the Near East throughout the Hellenistic period we find locally produced bowls that imitated the Athenian model and can be considered their descendants. These versions can also be considered a local imitation of the semi-fine color coated bowls (from Paphos) since they exhibited a poor quality version of the same bowl shapes. Their fabric can be divided into two types. *Coarse Ware* light buff/red ware with heavy and coarse wall. The fabric is unslipped with large white grits probably from an Israel workshop. *Slipped Ware* with dull, matte reddish-brown incomplete slip, usually applied by dipping, on interior and upper exterior walls. Eastern Mediterranean origin.

Coarse Ware

In Jaffa this ware is divided into three forms: incurved rim bowls, outcurved rim bowls, and slipped ware.

Incurved Rim Bowls

The most common type of locally manufactured bowls imitating the Attic tradition, during the Hellenistic period. They were first brought to Israel from Athens during the 4th and 3rd centuries BCE and became widespread in different variations of size and shape throughout the Hellenistic world, even persisting into the Roman period.

A. Flattened Base (Nos. 8–11)

Small Bowls. Incurved rim, ribbed on interior face, sloping wall and flat tiny disc or string cut base. They can be divided to two subtypes: the earlier with relatively heavy wall, and the later smaller size with a thinner wall.

In Jaffa, the later version occurs with a more V-shaped wall that was most common throughout Israel (8–11). As the distribution pattern confirms, their popularity was limited to the Coastal Plain and central Israel during the 2nd century BCE. Their number decreases the further north and they are completely absent, for example, at Tel Anafa or at other Galilean and Golan sites. At Ashdod they date to the 2nd half of the 2nd–1st centuries BCE (Dothan 1971:54–5, fig. 15:21–24, 16:2–9), at Tel Keisan in the 3rd–2nd centuries BCE (Briend 1980:110, fig. 13:33–34), in Samaria they were dated to the mid-2nd century (Crowfoot et al 1957, fig. 56:9–11), and at Tel Michal they can be found especially at the 2nd century BCE level (Fischer 1989:177, fig. 13.1:1; 179, fig. 13.2:1–5). At Dor they were identified as a small group of carelessly made bowls with a string cut base that could have been used as jar lids rather than bowls. They comprise less than 5% of all the incurved rim bowls (Rosenthal-Heginbottom 1995:290, Type 8e, fig. 6.1:34–38).

Date range: 3rd–2nd/1st cents. BCE

B. Ring Base (Nos. 12–14)

Small bowls with incurved rim and ring base.

They are less common than the flat base bowls in the local repertoire and are also considered a local imitation of the Classical Attic prototypes.

In Ashdod, one sample appears that is dated to the 2nd century BCE (Dothan 1967: 24, fig. 5:4–5; 1971: 54–5, fig. 15:20;). Another sample was recovered at Tel Michal from an uncertified Hellenistic level (Fischer 1989:183, fig.13.3:23). At Maresha, 14 examples appear in a variety of sizes and fabrics (Levine 2003:84, fig. 6.2:34–36). Other examples from Hellenistic contexts were recovered at Tirat Yehuda (Yeivin and Edelstein 1970:61, fig. 9:1) and Samaria (Crowfoot et al 1957:266, fig.56:8). Early Roman examples appeared at Tel Qiri (Avisar 1987:10, fig. 1:7–8) and Jericho (Bar-Nathan 2002:121, pl. 20:326, 85/75–31 BCE).

Date range: 2nd–1st cents. BCE

8 Bowl

Reg. No. 79/C/61/420; Area C, Bucket 644

Rim diam.: 11; Base diam.: 3.8; Max h.: 4

Incurved rim, rounded wall slightly ribbed at internal face, flat base. Very pale brown ware (10YR7/3), many white grits, hard fired.

9 Bowl

Reg. No. 79/B/60/021; Area B, Bucket 75

Rim diam.: 10; Base diam.: 4; Max h.: 4.5

Incurved rim, rounded wall slightly ribbed at internal face, flat base. Pink ware (7.5YR7/4), many small black grits, soft fired.

10 Bowl

Reg. No. 79/A/72/131; Area A, Bucket 22

Rim diam.: 9.7; Base diam.: 3.5; Max h.: 3.5

Incurved rim, rounded wall slightly ribbed at internal face, flat string cut base. Weak red ware (2.5YR5/4), dark redish gray core (2.5YR4/1), many small white grits, many medium black grits, medium fired.

11 Bowl

Reg. No. 79/A/72/132; Area A, Bucket 22

Rim diam.: 8; Base diam.: 3; Max h.: 3.4

Incurved rim, rounded walls, flat string cut base. Traces of burning on internal wall. Light reddish brown ware (5YR 6/3), many small white and black grits, soft fired.

12 Bowl

Reg. No. 79/A/70/136; Area A, Sq. L4, Bucket 254

Rim diam.: 11; Base diam.: 5; Max h.: 5.4

Incurved rim, rounded walls, ring base. Weak red ware (2.5YR5/3), dusty red core (2.5YR4/2), black and red slip outside. Black slip inside. Many small white and black grits, medium fired.

13 Bowl

Reg. No. 79/T/61/044; Area T, Pit 17

Rim diam.: 13; Base diam.: 5; Max h.: 4.75

Incurved rim, sloping wall, low ring base. Reddish-yellow ware (7.5YR6/6), many minute black grits, hard fired.

14 Bowl

Reg. No. C/65/B1014.5; Area C, Sq. DD103, Locus 440, Bucket 1014

Base diam.: 6.5; Max h.: 3

High ring base.

Outcurved Rim Bowls (No. 15)

Outcurved-turned rim, flaring wall, carinated at lower part, high ring base. This type appears at many sites with dull reddish-blackish slip and are considered a poor imitation of the Attic black glazed bowls (Guz-Zilberstein 1995:290–1, fig. 6.2). In Jaffa, a single complete unslipped bowl made of coarse dark brown fabric was found, probably a local imitation of the Greek prototype.

Date range: Hellenistic

15 Bowl

Reg. No. 79/C/65/578; Area C, Sq. CC103, Locus 446, Bucket 952

Rim diam.: 16.5; Base diam.: 6.6; Max h.: 5.5

Outcurved-rim, rounded walls, carinated at mid-wall, wide and high ring base. Red ware (2.5YR5/6), weak red wash (2.5YR5/4), many small and big white grits, many minute black grits, hard fired.

Slipped Ware

Open vessels including mainly bowls, plates, and cups made of semi-fine ware covered with dull red to brownish slip on their upper part and rim. The vessel form seems, at first glance, to be a local imitation of the Eastern Terra Sigillata ware. However, the very coarse and inferior quality of the vessels suggests a local workshop with a limited distribution pattern. In Jaffa as well as at other sites the potter succeeded in imitating the Sigillata forms, but failed in attempting to reconstruct the Terra Sigillata ware and slip quality. Several distinctive examples of the ware are all of a low deteriorated quality, even though the vessel forms clearly imitated the typical forms of that imported Hellenistic ware. Most of the bowls are made of coarse and gritty red ware with a rather heavy wall, and with a dull, matte, thin red slip covering the internal face and upper external face. The vessels attributed to that fabric are incurved bowls and fish plates.

In northern Israel at the same time, a parallel ware type was introduced that was defined as “Spatter Ware.”⁴² At Tel Anafa it comprised 15% of the identified fabrics at the site. Laboratory analysis confirmed the assumption that the fabric was of local origin and was manufactured during the Hellenistic period at a production center in the Huleh Valley. The distribution pattern justified its local origin since it was found at sites within the confines of the Huleh Valley (Berlin 1997:8–9).

Incurved Rim Bowls (Nos. 16–19)

Medium size bowls with plain incurved rim and low ring base. The dull slip covers the internal and upper external face with downward drippings. Most of the bowls were made of the Huleh Valley ware, but one (19) was made of a finer lighter walled ware. The incurved rim spatter ware bowls at Tel Anafa comprise 48% percent of the bowls, and only 7% were made of other coarse wares, which were common during the late 2nd – early 1st centuries BCE (i.e., 125–75 BCE) (Berlin 1997:74, pl. 16:133–40). Similar shaped bowls appeared at many sites but it is hard to determine identical types according to drawings and literal descriptions. However, the two bowls exposed from a pre-112 BCE context in Maresha and defined as “Decorated Plain Ware Bowls” seem similar to the Jaffa examples (Levine 2003:84, fig. 6.2:37–38). In Jericho, a group of local red slip ware common in the Herodian 1st century BCE context was found. The ware can be similar or parallel to Jaffa’s local imitations (Bar-Nathan 2002:121, pl. 20:326).

Date range: 2nd–1st cents. BCE

16 Bowl

Reg. No. 79/C/65/577; Area C, Sq. CC103, Bucket 941

Rim diam.: 13; Base diam.: 5.3; Max h.: 5.5

Incurved rim, rounded walls, ring base. Red ware (2.5YR5/6), dark red core (7.5YR4/6), dusty red slip (2.5YR3/4) on internal and upper part of outer face with drop drippings downward. A few big white grits, hard fired.

17 Bowl

Reg. No. 79/A/73/134; Area A, Sq. G101, Locus 1005, Bucket 43

Rim diam.: 12.5; Base diam.: 5.5; Max h.: 5

Incurved rim, rounded walls, ring base.

Reddish-brown burnish on internal and upper external wall. Weak red ware (2.5YR6/4), brown core (7.5YR4/2), red wash (2.5YR5/6) on internal and upper part of outer face. Many minute white and black grits, hard fired.

18 Bowl

Reg. No. 79/A/72/135; Area A, Sq. J101, Bucket 575

Rim diam.: 2.8; Base diam.: 6.2; Max h.: 5

⁴² Berlin 1997:7–8. The fabric is coarse and gritty with many red, white and gray inclusions of all sizes along with many voids that give it a spongy look. Vessel walls are fairly thick and there is usually a gray core, often thick, indicating less than full firing. The dominant mineral is quartz. The analysis indicates that spatter was made from a poor clay body with little care in production.

Incurved rim, rounded walls, ring base. Red ware (2.5YR5/6), dark red wash on internal and external face (2.5YR4/6). Many small white grits and a few minute black grits, hard fired.

19 Bowl

Reg. No. 79/A/74/069; Area A

Rim diam.: 12.5; Base diam.: 4.5; Max h.: 3

Incurved rim, rounded walls, ring base. Red ware (2.5YR6/6), dark red wash on both sides (2.5YR4/8). A few medium white grits and some small black grits, hard fired.

Fish Plates (Nos. 20–26)

These plates have a large projecting arched rim hanging slightly downward that is connected at a sharp angle to a flat, shallow, and almost horizontal wall with a small central depression in the floor of the bowl, and a low and narrow ring foot. The slip is pale and matte, covering the interior and exterior face homogeneously. An assemblage of complete bowls was discovered in Jaffa's Area H.

At Tel Anafa, a uniform assemblage of similar but not identical fish plates was found with a less arched rim and the same narrow and high ring base of the Spatter Ware, and was dated to 125 BCE (Berlin 1997:77, pl. 17:PW150–155). The uniformity of both assemblages may be an indication of local workshops that were scattered throughout Israel regions. Lapp's classification of the various Type 53 bowls with flared rim and flattened base can reflect an additional extension of the local Fish Plate industry in Israel. His examples are distributed mainly in the area of Beth-Zur and Samaria and dated to the mid-2nd century BCE (Lapp 1961:177, Type 53:c–d). Similar bowls appeared during the late 3rd–2nd centuries BCE in Jerusalem, in the area of the present Jewish Quarter (Geva 2003:144–5, pls. 5.1:35–36; 5.5:18). In Jericho, a single red slipped plate was recovered with an identical sharp connection between rim and wall dated to the 1st century BCE (Bar-Nathan 2002:94–5, pl. 16:269).

Date range: 3rd–2nd cents. BCE

20 Plate

Reg. No. 79/Y/64/120; Area Y, Sq. 4, Bucket 10

Rim diam.: 16.5; Base diam.: 5; Max h.: 9

Arched rim, slightly concave walls, central depression on floor, high ring base. Red ware (2.5YR6/6–5/6), red and black wash (2.5YR4/6). A few big and many small white grits, a few minute black grits, hard fired.

21 Plate

Reg. No. 79/H/64/018; Area H, Sq. 1, Locus 401, Bucket 11

Rim diam.: 16.5; Base diam.: 5; Max h.: 3.8

Arched rim, slightly concave walls, central depression on floor, high ring base. Reddish-brown ware (5YR4/4), dusky red wash (2.5YR4/4), hard fired.

22 Plate

Reg. No. 79/H/64/020; Area H, Sq. 1, Locus 402, Bucket 11

Rim diam.: 17; Base diam.: 5.4; Max h.: 4

Arched rim, slightly concave walls, central depression on floor, high ring base. Reddish-brown ware (5YR4/4), yellowish-red core (5YR4/6), reddish-gray wash (5YR5/2). A few minute white and black grits, medium fired.

23 Plate

Reg. No. 79/H/64/022; Area H, Sq. 1, Locus 402, Bucket 11

Rim diam.: 16.5; Base diam.: 5.2; Max h.: 3.5

Arched rim, slightly concave walls, central depression on floor, high ring base. Reddish-brown ware and wash (5YR5/4), hard fired.

24 Plate

Reg. No. 79/H/64/021; Area H, Sq. 1, Locus 402, Bucket 11

Rim diam.: 16; Base diam.: 5.5; Max h.: 4

Arched rim, slightly concave walls, central depression on floor, high ring base. Reddish-yellow ware (5YR6/6), reddish-brown wash (5YR4/4), hard fired.

25 Plate

Reg. No. 79/H/64/019; Area H, Sq. 1, Locus 402, Bucket 11

Rim diam.: 15.5; Base diam.: 5; Max h.: 3.6

Arched rim, slightly concave walls, central depression on floor, high ring base. Reddish-yellow ware (5YR6/6), very dark gray wash (5YR3/1), hard fired.

26 Plate

Reg. No. A/70/B183; Area A, Bucket 183

Rim diam.: 17.5; Max h.: 2.5

Arched rim, slightly concave walls. Very pale brown ware (10YR7/3), very dark gray slip (10YR3/1), many small black grits, medium fired.

Angular Bowls/Lids (No. 27)

These bowls and lids feature an upturned rim, angular thin wall. The fabric is light, medium fired with red/brownish dull slip. In Jaffa, a single sample made of very light ware was found, which seems to have been locally made (29). A few examples made of finer ware of high quality were recovered at several sites. All of them were described as imitations of the Hellenistic form. In Samaria, a 2nd century BCE version was recovered with a more thickened wall that becomes less thick during the 1st century like in the example from Jaffa (Crowfoot et al 1957: 252–3, fig. 51:8). At Maresha, a similar 1st century BCE bowl was identified as an imitation of Knidian vessels. The shape seems close to the Jaffa example but the fabric is hard fired and of a higher quality (Levine 2003:84–5, fig. 6.3:42–44). At Jericho, a similar Hasmonean type was described as being of a Hellenistic fish plate origin or as having alternately served as a lid (Bar-Nathan 2002:94–5, Type J–PL1B2, pl. 16:264–5). The Jaffa example is probably a late deteriorated imitation of a Hellenistic prototype.

Date range: early 1st cent. BCE

27 Bowl

Reg. No. A/70/B32.1; Area A, Sq. J4, Bucket 32

Rim diam.: 19; Max h.: 3.5

Plain sharply beveled rim, flaring walls. Reddish-yellow ware (7.5YR6/6), black slip, many small black-grits, medium fired.

Votive Miniature Bowls (No. 28)

Plain Rim, rounded wall with internal groove at junction with rounded base. This small bowl seems to be intended for votive purposes. At Tel Michal, two miniature bowls were found in the Persian Cemetery context (Fischer 1989:133–5, fig. 9.13:7–8). Other small bowls in Anemurium were defined as coarse ware saucers and were dated from the Roman to the Early Byzantine period (Williams 1989:100, fig. 62:587).

Date range: Persian–Early Byzantine

28 Bowl

Reg. No. 79/A/70/186; Area A; Sqs. J3–J4, Bucket 134

Rim diam.: 12; Base diam.: 2.5; Max h.: 2.5

Plain rim, low walls, groove on floor, rounded base.

Whitish slip. Traces of shaving. Pink ware (7.5YR7/3), pink slip (7.5YR8/2), medium fired.

Local Red Slip Ware

These types were the subject of research by many scholars who defined them under various terms: Slane called them “Black Slip Predecessor of Eastern Sigillata A (BSP)” since it was a local imitation of Attic black glazed ware and according to the NNA results they were an earlier product of Terra Sigillata Ware” (Slane 1997:269). Hayes’s term was the more general “Color Coated Ware” as analogous to Roman ware from the northern Roman provinces, which exhibit a similar slip treatment (Hayes 1991:23). Rotroff defined the family

in Sardis as “Partially Glazed Pottery” (Rotroff and Oliver 2003:24). The first to identify that type in a Palestine site was Kenyon in her Samaria publication where she called them “Household Ware” (Kenyon 1957:265). Lapp agreed with her assumption and defined the ware as a local imitation of glazed bowls dated to 2nd century BCE (Lapp 1961, Type 151–3). Local Red Slip Ware is the preferred term used in this publication.

The ware color is buff-light brown-red. The black lustrous glaze of the Attic prototypes survived during the 4th century BCE. The quality and color were more variable in the early 3rd century BCE, and the lustrous glaze rarely appears on plates dating after 275 BCE (Rotroff 1997:148). All vessels lack the true gloss-coating and have either matte black or red slip, or occasionally both mottled together. The slip was applied by dipping and does not extend to the exterior lower part and base.

Their prototype was probably the Classical Attic ware, considering the fact that the early types maintain the shape and function of the original vessels. Over time the hegemony of the Attic prototype gradually declined and the source of the bowls was no longer Attica but rather of another eastern region. The Levantine Red Slip Ware developed throughout the Hellenistic period. The most distinctive characteristic of that type was the fact that it was a transition family from the Classic black glazed ware to the Hellenistic Terra Sigillata. New vessel shapes developed and many new fabrics were manufactured in various sites all over the eastern Mediterranean. A few interesting and still relevant questions have been asked by Guz-Zilberstein, in light of the Dor assemblage, about their origin and production timespan (Guz-Zilberstein 1995:289). When exactly did they first appear and when was their use discontinued? In light of the evidence from Dor we can tell that their first appearance was in the mid-4th century BCE. By the beginning of the Hellenistic period about 75% of the bowls in the Hellenistic loci were of this type (Guz-Zilberstein 1995:289). At Tel Michal they were dated to the end of the 4th century (Singer-Avitz 1989). Also, can we define the time in which the potters changed their technique and preferred one slip color rather than another? It is possible to change the question and say that the potter did not change the technique but rather the fashion was changed. The potter preferred, for unknown but probably fashionable reasons, to fire the vessels in an oxidizing atmosphere that created red slip rather than black slip. By doing so the pottery takes one step away from this earlier type toward the newcoming Hellenistic family: Terra Sigillata.

The main centers of production remain unknown. Waagé (1948) was the first to assume an eastern Mediterranean origin, probably in Antioch on the Orontes, a suggestion that was adopted by many scholars such as Jones (1950) and Negev (1986). An NNA examination of Tel Anafa “Black Slip Predecessor Ware” confirmed the hypothesis that this family was an earlier product from the same center as the Terra Sigillata A Ware. In light of her re-examination of the provenance of ETS A and the Tel Anafa repertoire, Slane defined their source in northern Syria with a distribution pattern down the Orontes Valley, or alternatively in the area between Tel Anafa and Hama with a distribution pattern north up the Orontes Valley to Antioch (Slane 1997:272). On the basis of their distribution pattern, Hayes located their origin west of the Cyprus-SE Aegean area, or the south coast of Turkey. Their distribution indicates a regular occurrence in Palestinian sites, although finds from Cilicia and northern Syria should preclude a manufacturing source there. A northern Palestine alternative is not to be totally ruled out (Hayes 1991:23–4).⁴³

According to recent evidence from Israel we can confirm their popularity throughout Israel. The local red slipped ware appears at almost every excavated coastal site in the northern Phoenician Coastal Plain as well as along the southern shore (see below). Concerning the hinterland and the southern part of Israel, Hayes already mentioned, in his report on the Armenian Garden pottery in Jerusalem, the “Palestinian Red Slip” ware that seems to be a local imitation of the Eastern Terra Sigillata (Hayes 1985, figs. 19:9, 20:22, 24,36). Recent publications of Judean sites such as Jericho, the Jewish Quarter in Jerusalem, and Masada revealed their popularity within the Jewish community. In Jericho, the type occurred prior to the Terra Sigillata that flourished in Israel mainly during the 1st century BCE. Bar-Nathan suggested that the appearance of the local imitation of Terra Sigillata in the Judean region was directly connected with its absence from Hasmonean contexts. At that time, in the Jerusalem vicinity, a local red slip ware was produced, which can be termed “Local Judean Terra Sigillata” (Bar-Nathan 2002:119–121).

⁴³ They appear at many other Eastern Mediterranean sites: Soli, Tarsus, Hama, Pella, Rhodes, Samos, Miletus, Delos, Siphnos, Corinth, Benghazi, Tomis, Olbia, and Tanais.

The Jaffa repertoire confirms the assumption that a number of fabrics can be distinguished, since each of them was probably manufactured at another production center in the Eastern Mediterranean. In Jaffa, we can identify six different fabric types.

Fabric 1. Pseudo Attic

The ware is of buff color (7.56/4–6/6). The slip is applied by dipping, covering the whole bowl with a black matte color, except for the underside of the base. The fabric quality is relatively high and closer to the Attic prototype.

This fabric is the most common among the Jaffa incurved rim bowls and particularly the early incurved bowls (nos. 30, 32, 33, 45). This fact supports the assumption that the fabric characterizes an early stage in the development of the “Local Red Slip Ware.”

Fabric 2. Gray Ware

This fabric is similar to other red ware fabrics. The only difference is in the manner of firing. The gray ware was fired in a reduced oxygen free atmosphere and consequently is of gray fabric and black or gray glaze. As Rotroff said “It is not a ware at all, since any iron rich clay could be fired either red or gray at will, and the same shapes were made in both techniques at Sardis” (Rotroff and Oliver 2003:31–32).

In Jaffa this fabric has a gray color (7.56/2–5/2) and a dark gray core (7.5YR 6/3–4/1). The slip was made by dipping the interior and upper part of exterior wall with drippings toward the base. The slip quality was matte to semi-metallic. The common types were incurved rim bowls (nos. 38, 46, 48, 53) and fish plates (nos. 64, 72–73, 79).

Fabric 3. Cypriot

This fabric was without doubt manufactured in Cyprus and is similar in general texture to the common Cypriot slipped ware. The fabric was hard fired from a buff red (2.5YR5/6–6/6) to a reddish-yellow (5YR7/4) color. The slip is smooth, sometimes with a metallic shine and reddish-brown mottled color. The slip was applied by dipping and covering the interior and upper part of exterior with drippings toward the base. Archaeometric analysis of some incurved rim bowls from selected sites showed that Fabric 3 belonged to the ETS I group that seems to have been manufactured in East Cypriot production centers (Gunnweg et al. 1983:95, 109). At Paphos, Fabric 3 was defined as a large mass of undifferentiated buff tan wares of local origin (Hayes 1991:26). At Tel Anafa a few miscellaneous Eastern glazed bowls were identified that can be classified according to their color texture and inclusions as Fabric 3. The result of NNA analysis classified the fabric as of Cypriot origin (Slane 1997:359–60, FW510–519). A recent publication of the Hill of Agios Georgios pottery from Nicosia (East Cyprus) revealed a large assemblage of identical vessels dated from the 3rd to the 2nd century BCE. Berlin identified the ware as of local northeast Cypriot manufacture and perhaps even of Nicosian origin (Berlin and Pilacinski 2003:202–203).

This fabric is the most common in the Jaffa repertoire. It appears in bowls of all types: incurved rim bowls (nos. 29, 31, 39–40, 49–52, 54), outcurved rim bowl (no. 58), but mainly fish plates (nos. 62, 69–70, 76, 78, 80, 81), infolded rim bowls (nos. 82–83, 85–86, 88), skyphoi (nos. 96–97), and the singular jug (no. 106).

Fabric 4. Pseudo Sigillata A (Color coated ware; BSP)

Light buff-brown ware (7.5YR7/4) with darker core (7.5YR7/4–8/4). The wall is fairly thin and light. The slip is bright red (2.5YR5/6), frequently fired blackish on the upper part of the exterior where it was exposed in the kiln (2.5YR2.5/1). The “feel” of the ware is fairly close to that of the Eastern Sigillata A ware (Hayes 1985:23). This fabric is similar to the Tel Anafa black slip predecessor ware (Slane 1997:269–270).

In Jaffa the common shapes were the incurved rim bowls (nos. 33, 35–37, 41–44, 47, 55–56); outcurved rim bowls (no. 57, 59–61), fish plates (nos. 67–68, 71, 75, 77), infolded rim plates (nos. 87, 89–93) and the pinched bow handle bowls (nos. 100–105).

Fabric 5. Post Classical/or deteriorated Classical Fabric

This seems to be an early variant that characterizes early post classical types such as stamped bases (nos. 108–111), fish plates (nos. 74, 84), thickened rim bowls (nos. 94–95).

The slip is semi-lustrous and thick with remains of burnishing. The usual slip color is dark black with a touch of dark red on the underside of the base and in the center of the floor. The two tone bowl is typical to the Attic late 4th–early 3rd century BCE. They have different fired colors above and below a stacking line on the exterior and often have a stacking circle on the floor. However, the Jaffa examples could also be deteriorated examples of Attic origin.

Fabric 6. Undetermined Ware

Thin walled plate with matte and very rough slip, covering it completely. The slip color is dark brown (2.5YR 4/3–3/1) that turns to bright red color (2.5YR 4/8) toward the center of the plate gradually as a result of stack firing, typical of the deep fish plate (nos. 63, 65–66, 74) and thickened rim plates (nos. 94–95).

Concerning the chronological development of the local red slip ware, these types developed simultaneously throughout the Hellenistic period until the 1st century BCE. The Agios Georgios assemblage at Nicosia can be a good example for the existence of all types at a single stratigraphic phase, dated from the 3rd–2nd centuries BCE (Berlin and Pilacinski 2003).

Incurved Rim Bowls

Small bowls with incurved rim, curved body, and ring base. They are the dominant type in the Hellenistic period. Their first appearance in Israel already occurred in the late Persian period (mid-5th to mid-4th centuries BCE) contexts in Apollonia (Tal 1999:123, fig. 4.21; 153–4, fig. 4.35:2–4) and during the 4th century BCE in Dor and Tel Michal (see below). However, the type was most characteristic of the Hellenistic period and was dated by Lapp and others such as Gitin from the 2nd to the 1st centuries BCE, in accordance with the Samaria and Gezer assemblages (Lapp 1961:201:151; Crowfoot et al 1957:249–251, fig. 49:7–15; Gitin 1990:246–247, Types 193–5). The incurved rim bowls can be divided according to size into four subtypes, even though this does not always correlate with its chronological development.

A. Shallow Wall (Nos. 29–34)

Small shallow bowl with a thickened sharply incurved rim and pointed lip, heavy curved wall, and low ring base.

Type A was most similar to the Classical prototype and yielded the pseudo Attic Fabric 1. A few bowls appear with Fabric 3.

They appear in small numbers in all areas throughout Jaffa and probably were the earlier subtype. At selected sites they represent the earlier stage of development. For example, throughout Area D at Tel Michal the bowls were all from the latest phase of the Persian period (Singer-Avitz 1989:133, fig. 9.13:4–5). At Tell el-Hesi, they were recovered at the Persian level (Bennett and Blakely 1989, fig. 152:14). At Gezer, they were considered the earlier incurved rim bowl and dated from the late 3rd to the 1st century BCE (Gitin 1990:246, Type 195a, figs. 33:14–15, 34:10, 35:2, 38:4, 42:4). At Dor and Akko they came from loci of the 2nd half of the 4th to the 3rd centuries BCE (Guz-Zilberstein 1995:290, Type 8a fig. 6.1:1–8; Dothan 1976:30, fig. 30:6). At Tel Michal, Type 1 (with a relatively thick wall) was found at Stratum V dated to the 3rd century BCE (Fischer 1989:177–8, fig. 13.1:3–5). At Yoqne'am/Yoqne'am, two examples appear dated from the late 3rd to the 2nd centuries BCE (Avissar 1996:48, fig. X.1:1, 3). At Apollonia, one example was uncovered from the Late Persian stratum in Area H and another from Area D, both dated from the mid-5th to the mid-4th centuries BCE (Tal 1999:123, fig. 4.21:3; Fischer 1999:154, fig. 4.35:2–3). From the Hellenistic stratum in Apollonia one bowl was recovered in Area H dated from the late 4th to the mid-2nd centuries BCE (Fischer and Tal 1999:231, fig. 5.7:7).

Date range: mid-4th to mid-2nd cents. BCE

B. Deep Wall (Nos. 35–46)

Medium size bowl with deeper body and more curved floor. The rim and wall are thinner and the rim less incurved. They occur in Jaffa in all kinds of fabric and they seem to be the most common type of the semi-fine color coated ware. In addition, in Gezer they seem to be the most dominant type of incurved rim bowls (Gitin 1990:246, Type 195c, pls. 33:16, 35:4, 38:3,6, 42:5, 43:7). In light of examples from Israel they should be slightly later than Type A. At Dor they appears in loci from Hellenistic period till they were replaced by the Eastern Terra Sigillata in the Early Roman period (Guz-Zilberstein 1995:290, fig. 6.1:9–24). At Tel Michal, Type B occurs on a floor with two Seleucid coins that provide a *terminus post quem* for the end of Stratum IV in the last quarter of the 2nd century BCE (Fischer 1989:179–180, fig. 13.2:8–9). At Yoqne'am, one example appears dated from the late 3rd to the 2nd centuries BCE (Avisar 1996:48, fig. X.1:2). At Apollonia in Area D a few bowls were recovered from the Hellenistic stratum dated from the late 4th to the early 1st centuries BCE (Fischer and Tal 1999:238, fig. 5.12:13–14). At Hellenistic Maresha one example was discovered dated to the 2nd century (Levine 2003:84, fig. 6.2:37). The same type appeared as well in other Hellenistic East Mediterranean sites in Cyprus at Agios Georgios (Berlin and Pilacinski 2003:214, fig. 3:45–51) and Paphos (Hayes 1991:26–7, fig. XIV:6–7; lvii:37), at Antioch (Waagé 1948:13, and pl. II:77a), and in North Africa at Benghazi (Kenrick 1985:86, 90, fig. 17). This was due to the fact that the type was manufactured throughout Israel.

Date range: late 4th/3rd to early 1st cents. BCE

C. Wide Wall (Nos. 47–51)

Larger and deeper bowls with thin walls and curved floor. Most examples were found at coastal sites such as Apollonia where two bowls were recovered from the Hellenistic stratum dated from the late 4th to the early 1st centuries BCE (Fischer and Tal 1999:238, fig. 5.12:11–12), and also at Tel Michal (Fischer 1989:177–8, fig. 13.2:89), Tel Ya'oz (Fischer et al. 2008:136 fig. 13:5), and Akko (Dothan 1976:30, fig. 30:5). One example was discovered at both Hellenistic Samaria and Maresha dated to the 2nd century (Crowfoot et al 1957: 223–4, fig. 49:5–6; Levine 2003:84, fig. 6.2:38).

Date range: late 4th/3rd to early 1st cents. BCE

D. Narrow Wall (Nos. 52–56)

Miniature bowls that could belong to the cosmetic repertoire and used as mixing bowls. At Dor two similar examples appear (Guz-Zilberstein 1995:290, fig. 6.1:30–31). More examples were common during the late 3rd to the mid-2nd centuries BCE at Antioch (Waagé 1948:13, pl. II:77a), at mid-2nd century BCE Paphos (Hayes 1991:26–7, fig. XIV:6–7; lvii:37), the Late Hellenistic level at Sardis (Rotroff and Oliver 2003:24–5, pl. 7:33) and at Agios Georgios (Berlin and Pilacinski 2003:214, fig. 3:53–54).

Date range: late 3rd–early 1st cents. BCE

29 Bowl

Reg. No. 79/Y/64/121; Area Y, Sq. 2, Bucket 17

Rim diam.: 10.5; Base diam.: 5.8; Max h.: 4.5

Incurved rim, rounded walls, ring base with sharp resting surface. Fabric 3.

30 Bowl

Reg. No. 79/Y/68/336; Area Y, Bucket 38

Rim diam.: 12.5; Base diam.: 6; Max h.: 4.5

Incurved rim, rounded walls, ring base. Fabric 1. A few small white and black grits.

31 Bowl

Reg. No. 79/D/63/034; Area D, Locus 4, Bucket 19

Rim diam.: 15; Base diam.: 7; Max h.: 4

Incurved rim, rounded wall, high ring base. Fabric 3.

32 Bowl

Reg. No. 79/Y/64/122; Area Y, Sq. 4, Locus 606, Bucket 51

- Rim diam.: 11.5; Base diam.: 6; Max h.: 5
Incurved rim, rounded walls, sharp ring base. Fabric 1. Brown and black hues slip with drops on outer face. A few minute black grits.
- 33 Bowl
Reg. No. 79/X/60/011; Sounding X, Bucket 44
Rim diam.: 12.2; Base diam.: 5.7; Max h.: 5
Incurved rim, rounded walls, ring base. Fabric 4.
- 34 Bowl
Reg. No. 79/A/71/172; Area A, Bucket 339
Rim diam.: 12.2; Base diam.: 6; Max h.: 4
Incurved rim, rounded walls, ring base. Fabric 1
- 35 Bowl
Reg. No. 79/A/60/010; Area A
Rim diam.: 15.2; Max h.: 6.5
Incurved rim, ring base. Fabric 4.
- 36 Bowl
Reg. No. 79/A/56/170; Area A
Rim diam.: 13.5; Base diam.: 7.2; Max h.: 5
Incurved rim, rounded walls, ring base.
Brown wash on both sides. Fabric 4. Many minute and small white grits.
- 37 Bowl
Reg. No. 79/A/71/175; Area A, Bucket 106
Rim diam.: 12; Base diam.: 6.5; Max h.: 4.5
Incurved rim, rounded walls, ring base. Fabric 4. A few minute black grits.
- 38 Bowl
Reg. No. 79/A/73/114; Area A, Locus 1001, Bucket 36
Rim diam.: 13.2; Base diam.: 6; Max h.: 4.7
Incurved rim, rounded walls, ring base. Dark brown burnish on both sides. Fabric 2.
Many small white grits.
- 39 Bowl
Reg. No. 79/X/60/012; Sounding X, Bucket 44
Rim diam.: 10.6; Base diam.: 5.2; Max h.: 5.3
Incurved rim, rounded walls, ring base. Metallic brown slip on inner face and upper part of outer face that drips downward. Fabric 3.
- 40 Bowl
Reg. No. 79/Y/64/123; Area Y, Sq. 4, Locus 606, Bucket 51
Rim diam.: 11; Base diam.: 6.5; Max h.: 4.5
Incurved rim, rounded walls, ring base. Fabric 3. Many small white and black grits.
- 41 Bowl
Reg. No. 79/A/70/260; Area A, Sq. L4, Bucket 350
Rim diam.: 13.7; Base diam.: 7.5; Max h.: 6
Incurved rim, rounded walls, ring base. Fabric 4. Many small black grits.
- 42 Bowl
Reg. No. 79/A/56/256; Area A, Sq. G.6
Rim diam.: 15.6; Base diam.: 4.5; Max h.: 5.4
Incurved rim, rounded walls, ring base. Fabric 4.
- 43 Bowl
Reg. No. 79/C/65/576; Area C, Sq. CC102 Locus:449, Bucket 1009
Rim diam.: 12; Base diam.: 5.3; Max h.: 5.5
Incurved rim, rounded walls, high ring base. Fabric 4.
- 44 Bowl
Reg. No. 79/T/61/039; Area T

Rim diam.: 11.5; Base diam.: 6; Max h.: 5

Incurved rim, rounded wall, ring base. Fabric 4. A few big white and black grits.

45 Bowl

Reg. No. 79/A/71/171; Area A, Sq. I2, Bucket 250

Rim diam.: 11.5; Base diam.: 6; Max h.: 5

Incurved rim, rounded walls, ring base. Fabric 1. A few minute white grits.

46 Bowl

Reg. No. 79/A/71/170; Area A, Sq. I2, Bucket 280

Rim diam.: 12; Base diam.: 5.7; Max h.: 4.2

Incurved rim, rounded walls, ring base. Fabric 2.

47 Bowl

Reg. No. 79/H/64/016; Area H, Sq. 1, Locus 401, Bucket 11

Rim diam.: 14.5; Base diam.: 5.3; Max h.: 8

Incurved rim, rounded wall, high ring base. Fabric 4. Two bands of black and red slip below external rim.

48 Bowl

Reg. No. 79/T/61/038; Area T

Rim diam.: 15; Base diam.: 8.9; Max h.: 6.8

Incurved rim, rounded wall, ring base. Fabric 2.

49 Bowl

Reg. No. A/70/B152.1; Area A, Bucket 152

Rim diam.: 25; Max h.: 6

Incurved rim, rounded wall. Fabric 3. A few minute white grits.

50 Bowl

Reg. No. 79/A/73/135; Area A, Locus 1001, Bucket 24

Rim diam.: 15; Base diam.: 6; Max h.: 5.7

Incurved rim, rounded wall, ring base. Fabric 3. A few small black grits.

51 Bowl

Reg. No. 79/D/63/035; Area D, Bucket 20

Rim diam.: 16; Max h.: 4.5

Incurved rim, rounded wall. Fabric 3. A few small black grits.

52 Bowl

Reg. No. 79/A/73/125; Area A, Locus 1001, Bucket 47

Rim diam.: 10; Base diam.: 5.5; Max h.: 4

Incurved rim, rounded walls, ring base. Fabric 3. Many small white grits.

53 Bowl

Reg. No. 79/Y/64/125; Area Y, Sq. 1, Locus 601, Bucket 27

Rim diam.: 12; Base diam.: 8; Max h.: 5

Incurved rim, rounded walls, ring base. Fabric 2.

54 Bowl

Reg. No. 79/C/65/580; Area C, Bucket 843,

Rim diam.: 9; Base diam.: 4.5; Max h.: 4

Incurved rim, rounded walls, ring base. Fabric 3. A few minute white grits.

55 bowl

Reg. No. 79/A/56/266; Area A, Sq. H7

Rim diam.: 11; Base diam.: 7; Max h.: 4.7

Incurved rim, rounded walls, ring base with grooved resting surface. Fabric 4

56 Bowl

Reg. No. 79/A/58/142; Area A

Rim diam.: 13.7; Base diam.: 4.5; Max h.: 4.9

Incurved rim, rounded walls, ring base. Fabric 4.

Outcurved Rim Bowl (Nos. 57–61)

Flaring wall with out-turned rim, carinated in junction with flat floor. Like the previous incurved rim bowl it is a continuation of the Classical tradition. This type appeared in the late 5th century but lost its popularity in the 2nd century BCE. Lapp dated the type from the 2nd to the 1st century BCE (Lapp 1961:203:151.3).

They were divided in Dor into three subtypes according to their morphological-chronological development from a more rounded to a carinated wall (Guz-Zilberstein 1995:291).

In Jaffa, bowls appeared that belong to the later phase with more carinated and flaring wall, dated to the 2nd century BCE. They appear in all fabric types and were probably manufactured in various centers. Similar 2nd century bowls appeared at Tel Anafa (Slane 1997:280, pl. 4:FW35), Akko (Dothan 1976, fig. 30:8–9), Samaria (Lapp 1961:203, Type 151.3), and in Cyprus at Agios Georgios (Berlin and Pilacinski 2003:212–213, fig. 3:37–39).

Date range: 2nd cent. BCE

57 Bowl

Reg. No. 79/X/60/010; Sounding X, Bucket 33

Rim diam.: 12; Base diam.: 6; Max h.: 4

Outcurved rim, concaved wall, ring base. Fabric 4. Many minute black grits.

58 Bowl

Reg. No. 79/A/71/176; Area A, Sq. H2, Locus 677, Bucket 519

Rim diam.: 12; Base diam.: 5.7; Max h.: 4

Outcurved rim, concaved wall, ring base. Fabric 3.

59 Bowl

Reg. No. 79/T/61/040; Area T, Sq., Bucket 2

Rim diam.: 13.5; Max h.: 5.5

Outcurved rim, concaved wall, ring base. Fabric 4. Many minute white grits.

60 Bowl

Reg. No. 79/Y/68/325; Area:Y, Sq. Y14, Locus L–13, Bucket 64

Rim diam.: 11.5; Max h.: 3

Outcurved rim, concaved wall. Fabric 4. A few big white grits.

61 Bowl

Reg. No. A/70/B204.3; Area:..A, Sq. K4, Bucket 204

Rim diam.:15; Max h.: 2.4

Outcurved rim, concaved wall. Fabric 4. Many small white grits.

Fish Plates

Arched rim turning more or less downward, oblique wall with central depression and high ring base. At Tel Anafa 53 examples were found similar to Jaffa Subtype 1 that were dated with a secure *terminus ante quem* of 128/125 BCE (Slane 1997:275). They can be divided into two subtypes.

A. Deep Wall (Nos. 62–68)

Arched rim down-turned at about 45% below the horizontal. The wall is less flattened than on the Attic Fish Plates and more concaved, creating a deeper plate. The central depression is set off by a prominent ridge or raised ring and sometimes also by a groove at the base of the wall. This feature is typical of the 2nd century examples in Israel (Guz-Zilberstein 1995:291).

This type can be considered the latest remnant of the Attic Fish Plate dated from the late 3rd to the 2nd centuries (Rotroff 1997:147, fig. 51:727–730, 225–175 BCE). They exhibit features that may be considered a close imitation of the Attic Fish Plate, but the low quality slip can be good evidence for the gap between the origin and the imitation. The Fish Plate remained a popular shape in the Mediterranean sites during the 2nd century and examples are known also in Terra Sigillata shapes of the 1st century. After 175 CE the shape was rare. An explanation for its disappearance can be found in changes in eating habits.

The type is widespread from the 3rd to the 2nd century levels in Israeli sites. It was in common use in Dor during the 2nd century (Guz-Zilberstein 1995:291, fig. 6.3:6–16, Type 4b). At Samaria a few similar Fish Plates were described as “probably imported but not Attic” and dated to the 3rd century BCE (Crowfoot et al 1957:262, fig. 54:3–6) and others are of local manufacture, dated to the 2nd century BCE (Crowfoot et al 1957:262–3, fig. 54:7–10). At Tel Michal they were dated from the 3rd to the 2nd centuries BCE (Fischer 1989:179, fig. 13.1:9; 181, fig. 13.2:15–16). At Maresha a few examples were found (Levine 2003:85–6, fig. 6.3:47–9). At Tel Mevorakh three pieces appeared dated probably from the 3rd to the 2nd centuries (Rosenthal 1978:23, fig. 3:13–15). At Beth-Zur many examples were recovered dated from the 2nd quarter to the end of the 2nd century BCE (Lapp 1961:207, Type 153:k, l, m, n). At Tel Anafa the type was dated by *terminus ante quem* of 128/125 BCE (Slane 1997:275–6, pl.1:FW1–7). The southernmost site they reached was Jericho where the type was dated to the Hasmonean period (Bar-Nathan 2002:94, pl. 16:264–5).

Fish Plate no. 68 can be considered the latest sample. Rotroff dated a similar plate from the Athenian Agora from the late 2nd to the early 1st centuries BCE (Rotroff 1997:148, fig. 51:732). The stacking circle on the floor of some of the Jaffa examples was almost always presented after 275 BCE.

Date range: 3rd–late 2nd cents. BCE

B. Shallow Wall/Saucers (Nos. 69–81)

Late Version. Arched rim slightly down-turned, rounded wall, ring base. The typical central depression survived only in some of the bowls. At the early stage of their development they resembled the Fish Plate in profile. In the course of time the central depression disappeared, the wall became more rounded, and for this reason the term “saucer” became more suitable. The saucer was found over a large part of the Hellenistic world and in a wide variety of wares. At the Athenian Agora the type was very common and is represented by 60 pieces of local manufacture spread over the period 270–50 BCE (Rotroff 1997:149, fig. 52–53:734–775). The sample had a projecting rim ridged at the junction with the wall. The samples from Israel seem to be from another manufacturing center since their rim shape is more angular.

The popularity of the shape can be seen in the Jaffa repertoire since they were found in great numbers at all fields and areas. Most of Jaffa’s bowls belong to Wares 2 and 3. Their common use and wide distribution during the 2nd century at Israeli sites is the probably reason to their careless workmanship and dull slip. At Dor they are dated to the 2nd century BCE (Guz-Zilberstein 1995:292, fig. 6.3:22–27, Type 4d). At Samaria they were divided into two types, with and without a central depression, both of them of local or nearby origin and have been dated to the 2nd century BCE (Crowfoot et al. 1957, figs. 54:11–12, 55:1–6). At Tel Keisan only a few pieces were found, all being of the saucer type and none of them similar to the deep Fish Plate type (Briend 1980, fig. 13:12a–b). A similar saucer shape was defined in the Jewish Quarter of Jerusalem as Type 3a dated from the mid-2nd to the early 1st centuries BCE (Geva 2003:144–5, pls. 5.1:35–36; 5.5:18).

Date range: 2nd – early 1st cents. BCE

62 Plate

Reg. No. 79/A/60/009; Area A

Rim diam.: 23; Max h.: 5.6

Everted rim, ring base. Fabric 3.

63 Plate

Reg. No. 79/A/72/129; Area A, Bucket 39

Rim diam.: 22.5; Base diam.: 9.3; Max h.: 5.5

Flared rim overhanging down lip, sloping wall, central depression on floor, ring base. Fabric 6.

64 Plate

Reg. No. A/71/B271.3; Area A, Sq. J2, Bucket 271

Rim diam.: 20; Max h.: 2.8

Flared rim Overhanging down lip, sloping wall. Fabric 2. Many minute white grits.

65 Plate

Reg. No. 79/J/70/070; Area J, Bucket 11

Rim diam.: 21; Max h.: 2.5

Flared rim overhanging down lip, sloping wall. Fabric 6.

66 Plate

Reg. No. 79/A/70/144; Area A, Sq. K4, Locus 500, Bucket 24

Rim diam.: 22; Base diam.: 8

Plain sharply beveled rim and flaring wall, ridge around central depression, ring base with resting surface. Fabric 6. Many minute white grits.

67 Plate

Reg. No. C/65/B1014.1; Area C, Sq. DD103, Locus 456, Bucket 1014

Rim diam.: 28.5; Max h.: 2.5

Flared rim, overhanging down lip. Fabric 4.

68 Plate

Reg. No. C/65/B1052.2; Area C, Sq. DD103, Locus 458, Bucket 1052

Rim diam.: 22; Max h.: 3

Flared rim Overhanging down lip, sloping wall. Fabric 4.

69 Plate

Reg. No. 79/T/61/041; Area T, Bucket 2

Rim diam.: 15.5; Base diam.: 6; Max h.: 4.7

Projecting shelf rim, rounded wall, central depression on floor, ring base. Fabric 3.

A few small white grits.

70 Plate

Reg. No. 79/A/55/133; Area A, Locus B

Rim diam.: 17.5; Base diam.: 8; Max h.: 4

Projecting shelf rim, rounded wall, central depression on floor, ring base. Fabric 3. Many minute black grits.

71 Plate

Reg. No. C/65/B920.2; Area C, Sq. CC102, Bucket 920

Rim diam.: 19.5; Max h.: 2.5

Projecting shelf rim, rounded wall. Fabric 4.

72 Plate

Reg. No. 79/Y/68/335; Area:Y, Sq. Z14, Locus L-12, Bucket 97

Rim diam.: 13; Base diam.: 6; Max h.: 3.5

Projecting shelf rim, rounded wall, ring base. Fabric 2. A few minute white grits.

73 Plate

Reg. No. 79/C/64/053; Area C

Rim diam.: 16; Base diam.: 5.5; Max h.: 3.3

Projecting shelf rim, rounded wall, ring base. Fabric 2.

74 Plate

Reg. No. 79/A/73/116; Area A

Rim diam.: 15; Base diam.: 7; Max h.: 3.5

Projecting shelf rim, rounded wall, ring base. Fabric 5. Many minute black grits.

75 Plate

Reg. No. 9/T/61/046; Area T, Bucket 2

Rim diam.: 4.5; Base diam.: 9; Max h.: 3.5

Projecting shelf rim, rounded wall, ring base. Fabric 4. Many small white grits.

76 Plate

Reg. No. 79/A/71/177; Area A, Sq. I2, Bucket 294

Rim diam.: 14; Base diam.: 6.2; Max h.: 3

Projecting shelf rim, rounded wall, central depression on floor, ring base. Fabric 3.

77 Plate

Reg. No. 79/Y/64/113; Area Y, Sq. 5, Bucket 65

Rim diam.: 15; Base diam.: 6; Max h.: 3.5

Projecting shelf rim, rounded wall, ring base. Fabric 4. Many small white and black grits.

78 Plate

Reg. No. 79/X/60/009; Sounding X, Bucket 41

Rim diam.: 15; Base diam.: 9.5; Max h.: 3.5

Projecting shelf rim, rounded wall, ring base. Fabric 3. A few minute white and black grits.

79 Plate

Reg. No. 79/T/61/042; Area T, Bucket 2

Rim diam.: 14; Base diam.: 6; Max h.: 3.2

Projecting shelf rim, rounded wall, central depression on floor, ring base. Fabric 2. Many big white and black grits.

80 Plate

Reg. No. C/65/B1038.2; Area C, Sq. CC103, Locus 456, Bucket 1038

Rim diam.: 13.5; Max h.: 3

Projecting shelf rim, rounded wall. Fabric 3.

81 Plate

Reg. No. C/65/647; Area C, Sq. CC103, Locus 446, Bucket 953

Rim diam.: 11.5; Max h.: 2.5

Projecting shelf rim, rounded wall. Fabric 3.

Infolded Rim Plate (Nos. 82–93)

Thick infolded rim, shallow and almost horizontal wall, high ring base.

Like the former type they were most popular in Jaffa, particularly in areas C and A. Most of them were made of Fabric 3–4 and can be of Cypriot origin. Most of them are lacking the floor. According to two complete examples, the type appears with or without the traditional fish plate depression in the floor center. In addition we can distinguish morphological development from the more concaved wall bowls with rolled rim (82–87) that were dated in Sardis to the 3rd century BCE (Rotroff and Oliver 2003:29, pl. 12:62), toward the sloping wall bowls with thickened rim dated to the Late Hellenistic period (Rotroff and Oliver 2003:30, pl. 13:66–67, 14:68) (nos. 88–93). The later version was dated in the Athenian Agora to 110–86 BCE (Rotroff 1997:142–5, 314, fig. 50:700). However, the infolded rim type is probably another stage of the Fish Plate development. Like the former type, the distribution pattern was concentrated during the Hellenistic period in coastal sites such as Dor, Apollonia, and Yavneh Yam (Guz-Zilberstein 1995:292–293, fig. 6.4:1–9; Tal 1999:123, fig. 4.21:1; 153–4 fig. 4.35:1; 237, fig. 5.12:1–2; Tal et al. 2005:274, fig. 20:1), but in small quantities. The type appeared as well at Judean sites, for example, at the Armenian Garden (Tushingham 1985, fig. 48:9–13). In the Jewish Quarter of Jerusalem the type was classified as the latest Fish Plate version (Type 4), which appeared in small numbers during the 2nd century BCE (Geva 2003:145, pl. 5.10:37). At Tel Anafa the type was defined as Spatter Saucer dated to the Late Hellenistic period (Berlin 1997:78–9, pl. 17:PW156–159). Outside Israel similar bowl was manufactured during the late 2nd – early 1st centuries BCE at Paphos (175–120/100 BCE) (Hayes 1991:135 fig. XLVIII:50–1; fig. XLV:16), Antioch (Waagé 1948:11, pl. I:2k) and Cyprus, in Agios Georgios (Berlin and Pilacinski 2003:209–210, fig. 2:12–16, 20).

Date range: 2nd – early 1st cents. BCE

82 Plate

Reg. No. A/71/B271.2; Area A, Sq. J2, Bucket 271

Rim diam.: 18; Base diam.: 6.5; Max h.: 3

Infolded rim, sloping wall, ring base. Fabric 3. A few small and big white grits.

83 Plate

Reg. No. 79/J/70/069; Area J, Locus 1, Bucket 17

Rim diam.: 17; Max h.: 2.5

Infolded rim, sloping wall. Fabric 3.

84 Plate

Reg. No. 79/A/71/183; Area A, Sq. I4, Bucket 744

Rim diam.: 17; Base diam.: 7.5; Max h.: 8.5

Infolded rim, sloping wall, ring base. Fabric 5. Many small black grits.

85 Plate

Reg. No. A/71/B253; Area A, Sq. J2, Bucket 253

Rim diam.: 19; Base diam.: 7; Max h.: 2.8

Infolded rim, sloping wall, ring base. Fabric 3. A few minute white grits and many minute black grits.

86 Plate

Reg. No. 79/X/60/043; Sounding X, Bucket 45

Rim diam.: 12.5; Base diam.: 5.8; Max h.: 3

Infolded rim, sloping wall, ring base. Fabric 3.

87 Plate

Reg. No. 79/Y/68/334; Area Y, Sq. Z15, Locus L-19, Bucket 104

Rim diam.: 17.4; Base diam.: 6.4; Max h.: 3.5

infolded rim with a groove on its inner face, sloping walls, central depression on floor, ring base.

Fabric 4.

88 Plate

Reg. No. 79/C/65/581; Area C, Sq. CC102, Bucket 993

Rim diam.: 17; Base diam.: 6; Max h.: 3

Infolded rim, sloping wall, ring base. Fabric 3. Many small black grits.

89 Plate

Reg. No. C/65/B1033.2; Area C, Sq. CC103, Locus 451, Bucket 1033

Rim diam.: 16.5; Max h.: 1.5

Infolded rim, sloping wall. Fabric 4.

90 Plate

Reg. No. A/70/B204.2; Area A, Bucket 204

Rim diam.: 17; Max h.: 2.5

Infolded rim, sloping wall. Fabric 4.

91 Plate

Reg. No. C/65/B1052.1; Area C, Sq. DD103, Locus 458, Bucket 1052

Rim diam.: 16.5; Max h.: 1.5

Infolded rim, sloping wall. Fabric 4.

92 Plate

Reg. No. C/65/B897.1; Area C, Sq. DD103, Locus 439, Bucket 897

Rim diam.: 15.5; Max h.: 2

Infolded rim, sloping wall. Fabric 4.

93 Plate

Reg. No. C/65/B1014.2; Area C, Sq. DD103, Locus 440, Bucket 1014

Rim diam.: 18; Max h.: 1.5

Infolded rim. Fabric 4.

Thickened Rim Plate (Nos. 94–95)

Thick rolled rim, thick rounded wall and ring base. In Jaffa, smaller and larger versions appeared. Both were made of the post classical Fabric 5 and probably can be considered an early imitation of the Attic prototype. The form is less common in Israel and missing from most coastal sites, which had a plentiful quantity of other incurved bowls and fish plates. The few examples were found at the 3rd century BCE level at Samaria (Crowfoot et al 1957:252–3, fig. 51:4) and Dor (Guz-Zilberstein 1985:293, fig. 6.4:20).

Date range: 3rd–2nd cents. BCE

94 Plate

Reg. No. 79/G/64/048; Area G, Sq. 25 Locus:, Bucket 89

Rim diam.: 33; Base diam.: 20.5; Max h.: 5

Thickened incurved rim, thick heavy wall, ring base. Fabric 5.

95 Plate

Reg. No. 79/A/71/180; Area A, Bucket 25

Rim diam.: 18.5; Base diam.: 13; Max h.: 2.4

Thickened incurved rim, thick heavy wall, ring base. Fabric 5.

Kantharoid Skyphoi (Nos. 96–99)

Large deep bowl. Pointed rim, hemispherical body and high ring base, two vertical handles extending outward horizontally and turning sharply downward, frequently spurred at the turn. The red-brownish slip is rather dull with a matte appearance covering the interior and upper exterior face. They seem to be a mixture of their Attic prototypes the skyphos and kantharos, excluding the slip that turns out to be of poor quality.

The skyphos was a popular drinking vessel in the Pseudo Attic repertoire of the Hellenistic period, mainly during the 3rd and 2nd centuries BCE (Jones 1950:57, fig. 181:83–6, A–C). Kenyon dated the samples from Samaria to the 1st half of the 2nd century and attributed their origin to Tarsus according to their popularity in that region (Kenyon 1957:225–7, fig. 39:4; Lapp 1961: Type 151.5). The evidence from Palestinian sites supports the assumption that they went out of use around 150 BCE. At Tirat Yehuda and Tel Keisan they appear during the 1st half of the 2nd century BCE (Yeivin and Edelstein 1970, fig. 9:23; Briend 1980:pl. 13:26). At Ashdod a single sample appears at Locus 16 dated from the late 2nd to the early 1st century BCE (Dothan 1971: 47, fig. 10:4).

Their popularity in coastal sites in Palestine is evident according to their common appearance (they account for 5%–15% of the small bowls) at Hellenistic loci dated to 325–175 BCE in Dor (Guz-Zilberstein 1995:294, fig. 6.6). At Apollonia, they appear at the Hellenistic refuse pit (Fischer and Tal 1999:237, fig. 5.11:12). At Tel Michal, a single sample was recovered from the Northern Hill and can be dated from the 3rd to the 1st centuries BCE (Fischer 1989:185, fig. 13.3:24).

In Jaffa they appear in Fabric 3 (Cyprus) and 4 (Pseudo Sigillta), a fact that can confirm the authors assumption about their connection with Sigillata Ware (Fischer and Tal 1999:237). However, similar vessels appeared at many Hellenistic Cypriot sites such as Agios Georgios (Berlin and Pilacinski 2003:215, fig. 4:61–63), Salamis, Kition, Tarsus, and Amanthous and could have been manufactured nearby (Berlin and Pilacinski 2003:215). Three of the four examples in Jaffa were recovered from tombs in Area T, one of them complete and without slip, made of local coarse ware (99). A similar unslipped example appeared at Dor, but was classified within the group of dusky Red Slipped Skyphoi of the Hellenistic levels dated until the 2nd half of 2nd century BCE (Guz-Zilberstein 1995:294, fig. 6.6:8). The Jaffa example is probably a local imitation of the Greek prototypes.

Date range: 3rd–early 1st cents. BCE

96 Skyphos

Reg. No. 79/T/62/011; Area T, Grave 18, Bucket 9

Rim diam.: 15.5; Base diam.: 4; Max h.: 6.5

Incurved rim, rounded wall, narrowing toward base, high ring base with small protrusion, two vertical handles attached from rim to wall. Fabric 3.

97 Skyphos

Reg. No. 79/H/64/028; Area H, Sq. 2, Bucket 17

Rim diam.: 14; Max h.: 4

Plain pointed rim, two vertical handles attached from rim to wall. Fabric 3.

98 Skyphos

Reg. No. 79/T/61/037; Area T, Grave 1, Bucket 5

Rim diam.: 9.6; Base diam.: 4; Max h.: 4

Incurved rim, rounded wall, narrowing toward base, high ring base, concave and small protrusion, two vertical handles attached from rim to wall. Fabric 4.

99 Skyphos

Reg. No. 79/T/61/005; Area T, Grave 5

Rim diam.: 13.5; Base diam.: 5; Max h.: 5

Incurved rim, rounded wall, narrowing toward base, high ring base, concave and small protrusion, two vertical handles attached from rim to wall. Light red surface (2.5YR7/6).

Pinched Bow Handles Bowls (Nos. 100–105)

Narrow band rim, conical wall. All bowl bases are missing in Jaffa, but parallel types appear with ring base. Two horizontal pinched bow handles below rim. Most bowls have red slip with black wide band on upper external wall. Morphologically, they resemble the Knidian gray ware cups.

The type was found at many Hellenistic eastern Mediterranean and Levantine sites. In contrast to the previous types the form is new rather than imitation of Classical types. Their fabric is not distinctive and until recently they have usually been classified as local fine ware. At Paphos they were defined as the most characteristic form of Imported Fabric A, which was manufactured at the Sigillata A production center during 120–175/200 BCE (Hayes 1991:23–4). Analysis of a Tel Anafa example (FW40) suggests a Syro-Palestinian source (Slane 1997:281). According to the common appearance of the type in Hellenistic levels in the Levant, chiefly in Israel, Rotroff identified the bowls at the Athenian Agora as “Palestinian Cup,” dated post 200 BCE (Rotroff 1997:118, fig. 22:391–394). In Benghazi, the type was defined as a local ware bowl as well as an imported form mainly during the 1st century BCE (Riley 1979:281–2, fig. 109:602–605).

In Jaffa, only rim fragments were found, a few with traces of handles. The Jaffa fabric seems to be thinner and looser than the typical ETS A vessels, but is rather similar to Jaffa Fabric 4 which could have been manufactured at the ETS A production center. They reached their peak in the Levant about 150 BCE, but continued to be made in a degenerated imitation form until the end of the century. The Jaffa fabric seems to be the latest stage, which is similar to the locally made “Pinched Bow bowl” from Maresha (Levine 2003:86–88, fig. 6.3:50–52).

Concerning their distribution in Israel, it seem to be limited to a small quantity in a wide area. They were used in the Galilee in Beth-Shean and Tel Anafa until the last quarter of the 2nd century BCE (Slane 1997:281), as well as in the Samaritan hinterland (Crowfoot et al 1957:266, fig. 57:1), at Beth-Zur (Lapp 1961:204, Type 151.4), Gezer (Gitin 1990:249–250, pls 38:10, 40:10), and Maresha, and in the Coastal Plain at Shiqmona (Elgavish 1976:70, fig. 3:4), and Ashdod (Dothan 1971:47, figs.9:15, 10:15, 16:1 fig. 60:21–23).

Date range: 2nd – early 1st cents. BCE

100 Bowl

Reg. No. 79/A/60/001; Area A, Sq. H11, Locus 350, Bucket 57

Rim diam.: 16.5; Max h.: 6

Thick rim, rounded, two stressed handles from below the rim to the wall. Fabric 4.

101 Bowl

Reg. No. A/70/B204.5; Area A, Sq. K4, Bucket 204

Rim diam.: 16; Max h.: 2.9

Thickened banded rim, concaved wall, two horizontal handles attached below rim. Fabric 4.

102 Bowl

Reg. No. A/70/B161.3; Area A, Sq. K3, Bucket 161

Rim diam.: 19; Max h.: 3.5

Thickened banded rim, concaved wall. Fabric 4. Many minute white grits.

103 Bowl

Reg. No. A/70/B161.2; Area A, Sq. K3, Bucket 161

Rim diam.: 19; Max h.: 3.5

Thickened banded rim, concaved wall. Fabric 4.

104 Bowl

Reg. No. 79/A/70/196; Area A, Sq. L3, Bucket 241

Rim diam.: 15.5; Max h.: 2.5

Thickened banded rim, concaved wall, two horizontal handles attached below rim. Fabric 4.

105 Bowl

Reg. No. 79/J/70/068; Area J, Buckets 22–23

Rim diam.: 14.5; Max h.: 3

Thickened banded rim, concaved wall, two horizontal handles attached below rim.
Fabric 4.

Jugs (Nos. 106–107)

A single jug made of Fabric 3 that resembles the Cypriot Ware (106). At Tel Anafa (Slane 1997:362, pl. 31:FW518) and Paphos (Hayes 1991:28, fig. 16:3–4) similar jug fragments of Cypriot origin were found, dated from the 2nd to the 1st centuries BCE.

Date range : 2nd–1st cents. BCE

106 Jug

Reg. No. 79/A/70/174; Area A, Sq. L4, Bucket 350

Base diam.: 6; Max h.: 19

Cylindrical neck, rounded shoulder, rounded ribbed inside body, ring base, traces of handle on shoulder. Fabric 3.

107 Jug

Reg. No. C/65/B911.2; Area C, Sq. CC103, Bucket 911

Base diam.: 10; Max h.: 5

High ring base. Fabric 4.

9.1.1.3. Roman–Byzantine Bowls

Fine-Byzantine Ware

Fine Byzantine ware refers to vessels of various forms that are distinguished by their fabric and decorations. They are characterized by a thin wall and hard fired ware with burnished bands on the external wall. These vessel forms can be divided into four groups: bowls, cups, juglets, and jugs. They were common in Israel during the Byzantine period and continued well into the Early Islamic period. It has been suggested that they represent a type of southern fine ware with prototypes in Nabatean ware (Gihon 1974:134). The distribution pattern known today points to Jerusalem as a center of production (Magness 1993:160).

In Jaffa, a few bowls and cups were found, generally decorated with an incised wavy line (108) below the rim, or with plain wall (109–110).

Decorated Cups (Type 1)

Plain incurved rim with small, narrow-diameter, rounded wall and low ring base. In Jerusalem the type were divided into six variants in accordance to morphological and chronological development (Magness 1993:193–198).

Date range: late Byzantine

Two variations were found in Jaffa.

Type 1A with incised wavy line below rim (108). In Jerusalem the subtype was identified as the earlier form of the 1A variant, dated from the mid-6th to the late 7th/early 8th centuries CE (Magness 1993:193–4). The type was very common throughout Judea, and also reached the Coastal Plain. In Jaffa, only few fragments were found due to the careless excavation of the Byzantine level at the site. Examples were also re-covered in Caesarea (Tomber 1999:20, fig. 8:141).

Type 1B Plain wall and flat base (109–110). In Jerusalem the subtype was considered a later developed form of the 1D variant, which appeared from the late 7th/early 8th until the 9th/10th century CE (Magness 1993:194). The bowls are characterized by pure burnish on the external wall. The Jaffa examples probably date to the end of the Byzantine and the Early Islamic periods.

108 Cup

Reg. No. C/61/B80.1; Area C, Sq. DD100, Bucket 80

Rim diam.: 11.9; Max h.: 4

Plain rim, rounded wall. On external wall single incised wavy line below rim. Red ware (2.5YR6/8).
hard fired.

109 Cup

Reg. No. 79/A/56/221; Area A, Sq. H6

Rim diam.: 5; Max h.: 6

Pointed rim, rounded wall, pare burnished on external wall. Red ware (2.5YR6/6) and dark reddish-gray core (2.5YR5/1), hard fired.

110 Cup

Reg. No. 79/A/70/213; Area A, Sq. K4, Bucket 173

Rim diam.: 7; Base diam.: 3.8; Max h.: 7.7

Sharp and sloping inward rim, rounded walls, flattened base. Brown pare burnished bands on outer face, spiral incision on underside. Light brown ware (7.5YR6/4) and brown core (7.5YR5/3), hard fired.

Jug (No. 111)

Fine Ware jug with flanged rim and high neck. In Jaffa, a single fragment was found that was similar to the Magness Type 2b from Ramat Rachel dated from the mid-6th to the early 8th centuries CE (Magness 1993:241.1).

111 Jug

Reg. No. C/61/B49; Area C, Sq. CC100, Bucket 49

Rim diam.: 3.5; Max h.: 6

Flanged rim, high neck. Light reddish-brown ware (5YR6/3) and dark gray core (5YR4/1). A few minute white grits. Hard fired.

Byzantine Rouletted Bowl (No. 112)

The Rouletted bowls are a distinctive type of bowl with a carinated wall and everted complex rim. Most, but not all, are decorated with a roulette pattern on the external wall, sometimes in combination with a drippy red/brown slip. They were common in Israel during the Late Roman to the Byzantine period, particularly in Jerusalem and its vicinity (Magness 1992a:170, fig.5.9; 1993:185:7, 186:9, 12). They represented ware of a local origin. It was suggested that their appearance was connected to the revival of Jerusalem in the time of Constantine. It is also unclear whether these bowls represent a direct development of ETS Ware or a local imitation of Late Roman Red Slip Ware (Magness 1992a:152).

In Jaffa, a single bowl was found (118). Magness divided the Rouletted Bowls into four morphologic-chronologic subtypes dated from the late 3rd/early 4th until the early 7th centuries CE (Magness 1993:185–192).

In Jaffa, a single example of the early subtype 2A was found, dated from the late 3rd/early 4th until the 5th centuries CE (Magness 1993:185–6; 2005:108, fig. 1:4).

Date range: late 3rd–early 5th cents. CE

112 Bowl

Reg. No. 79/C/61/403–4; Area C, Sq. DD100, Locus 414, Bucket 180

Max h.: 4.5

Flat thickened rim with leg below rim, rounded slightly carinated wall with outer face featuring coarse uneven roulette decoration below rim. Light yellowish-brown ware (10YR6/4), red and dusky red painted on both sides (2.5YR5/6–3/3). Many big white grits, hard fired.

9.1.2. Juglets

9.1.2.1. Persian Juglets

The evidence on local juglets of the Persian period is rather incomplete (Lapp 1970:184). Stern's classification was and still can be considered the most complete. Stern divided the juglets into four subtypes: globular, perfume, dipper, and cups (Stern 1982:121–127). Most of the juglet shapes display a continuation of the local Iron Age tradition. The later types are evidence of Attic influences. In Jaffa a single type was found.

Globular Body (No. 113)

Collar rim, high and narrow neck, globular body with rounded or flattened base. One handle attached to the rim. In Jaffa, a single undecorated fragment made of local coarse ware was recovered. However, the globular juglet prototype is the Cypro-Phoenician "Plain White" juglet that appeared with two variations in the Persian repertoire; the earlier one is with a rounded base and the later on with a flattened base. In addition, many local examples were decorated with red bands on the body in imitation of the Cypriot prototype. During the Hellenistic period the type received a cup-like mouth. At Tell el-Ful similar juglets were dated to the 5th century according to parallels (Lapp 1978:92, fig. 61:1–8). At Gezer, a similar juglet made of fine ware was considered a Greek import or imitation of Greek pottery (Gitin 1990:233, figs. 29:30; 46:17). A local Persian type similar to the Jaffa example was found at 'Atlit (Stern 1982:123, photo 183) and Wadi ed-Daliyeh (Lapp and Lapp 1974:184, fig. 10:3), dated to the 4th century BCE.

Date range: 5th–4th cents. BCE

113 Juglet

Reg. No. A/70/B173; Area A, Sq. K4, Bucket 173

Rim diam.: 2.5; Max h.: 6

Collared rim. High narrow neck, globular body. One handle attached from rim to shoulder(?). Very pale brown ware (10YR7/4), a few small gray grits, medium fired.

Perfume Juglets

Very small juglets usually with globular or bag-shaped body, and the typical one has a lifted triangular shaped handle. Their distribution in Israel was relatively limited and confined to the Coastal Plain. At coastal sites such as Dor they appear in small quantities (Guz-Zilberstein 1995:65). At Apollonia, the juglets consisted of 1.69% of the common ware assemblage of the late 6th to mid-5th centuries BCE and 2.84% of the common ware assemblage of the mid-5th to mid-4th centuries BCE (Tal 1999:126, 157). Their life span was confined to the Late Persian period. A few fragments appear also in the Galilee (Tel Qiri in the Jezreel Valley)⁴⁴ and the southern desert. In Jaffa, four types are most common.

A. Squatted Body (No. 114)

Flaring rim and neck, squatted body and rounded base. One lifted triangular shaped handle attached from rim to shoulder. Stern dated this type according to parallels from En Gedi and 'Ein Arub to the later part of the Persian period (Stern 1982:124, Type 2, fig. 186, pl. 27:19). In Jaffa, a single complete juglet was recovered. an identical example appears at Tell el-Hesi, dated from the late 6th to the mid-5th centuries BCE (Bennett and Blakely 1989, fig. 149:6) and another in Akko (Dothan 1976:27, fig. 27:15). A single complete juglet, identical in shape, from Tell el-Ful was recovered from a cistern and can be dated according to parallels to late 6th century BCE (Lapp 1978:92, fig. 60:6). A later version with a lower neck dated to 490–450 BCE was found at Tel Michal (Fischer 1989:199, fig. 9.1:21).

Date range: late 6th mid-5th cents. BCE

⁴⁴ Avissar 1987:20, fig. 5:16–17. Two body fragments do not correspond to the Jaffa examples.

B. Bag-shaped Body (Nos. 115–116)

Thickened collared rim, leaning shoulder flaring toward bag-shaped body and flat base. One lifted handle was attached from rim to shoulder. Usually decorated with wide red or brown painted band across the body.

The bag-shaped juglets were the most common ones in al-Mina on the Syrian coast, and were used as oil containers (Stern 1982:125, Type 3–4, fig. 187–8) In Syrian and Lebanese assemblages, the bag-shaped juglet is one of the most common types of the Persian repertoire (Lehmann 1996, Type 43, Form 270/1; Lehmann 1998, fig. 9:11). That type can be considered having a Levantine imported prototype.

Their stratigraphical-chronological distribution at Tell el-Hesi shows that the earlier type was decorated and had a more bag-shaped body, while the later samples are undecorated, globular in shape and with a smaller handle (Bennett and Blakely 1989:214, figs. 138:16; 162:28). According to that assumption we should conclude that the earlier late 6th century type could have been imported while the later early 4th century type was a locally made juglet.

The Jaffa examples preserved the rim and shoulder only (115–116). They can be considered a local later development of the type, since they lack any decoration.

Their distribution pattern throughout Israel indicate that this later subtype was in common use during the late Persian period in coastal sites such as Tel Michal and Dor (Fischer 1989:137, fig. 9.15:9; Guz-Zilberstein 1995:65, fig. 2.11:4).

Date range: late Persian

C. High Foot (Nos. 117–121)

Heavy juglet. Thickened collared rim and high and narrow neck slightly flaring toward the rim. The body is globular to spindle-shaped and the base is high and truncated. The handle is lifted and is attached from neck base to shoulder. The body is usually decorated with a wide band painted in brown or red color (Stern 1982:126, Type 6, fig. 190).

This type is well known in Phoenician coastal sites during the 5th–4th centuries BCE and probably continued to appear in the same Phoenician ware in the Hellenistic levels according to the Tel Anafa assemblage (24 fragments) (Berlin 1997:50, pl. 9:49–52). Despite Stern's note that they are confined to the Palestinian part of the coast (Stern 1978:39) they appear as well in the Syrian and Lebanese assemblages. In that region the type belongs to one of the most common typical forms throughout the Persian period until 300 BCE (Lehmann 1998, fig. 9:14).

In Jaffa, they are well represented in all excavated areas. Two complete juglets were found there (117–118) and many other fragments (119–121).

This type was recovered at hinterland sites such as Tell el-Hesi in the late Persian period substratum dated to early 4th century BCE (Bennett and Blakely 1989:214, figs. 159:8–9, 161:26, 175:b), and in a refuse pit dated to the 5th century BCE at Qedumim in Samaria (Stern and Magen 1984:23, fig. 7:5). In Galilee, the type appears during the Hellenistic period at Tel Anafa (Berlin 1997:50, pl. 9:49–52). However, it was the most common type in Coastal Plain sites. At Tel Michal, two complete juglets were found in the mid-5th century stratum X and in the 2nd half of the 4th century BCE stratum VI (Fischer 1989:122, fig. 9.2:7; 130, fig. 9.8:11). At Dor (Guz-Zilberstein 1995:65–6, fig. 2.11:5) Tel Mevorakh (Stern 1978:39, fig. 9:19–21), and Ramat Hanadiv (Zilberstein 2000:428, fig. iv:1) they were dated to late 4th century BCE context.

Date range: mid-5th – late 4th cents. BCE

D. Small Jars/Local Amphoriskoi (Nos. 122–123)

Thick flared rim, high and narrow neck, carinated shoulder and spindle-shaped body with truncated base. Two handles attached from shoulder to body. Two complete jars were found during the second excavation season in Area A. One of the Jaffa examples was first published by Stern as a Small Jar Type B dated from the late 5th to the 4th centuries BCE (Stern 1982:127, photo 195). Stern believes the type to be unique and unknown and the only other examples were found at Yaham (Birman and Winberger 2001:51–54).

Date range: late 5th–4th cents. BCE

114 Juglet

Reg. No. 79/C/71/052; Area C, Bucket 27

Rim diam.: 3.4; Base diam.: 1.4; Max h.: 8.2

Flaring rim and neck, bag shaped body, curved base, lifted handle attached from rim to body. Red ware (2.5YR5/8) and weak red wash (2.5YR6/4), soft fired.

115 Juglet

Reg. No. A/72/B270; Area A, Sq. L3, Locus 706, Bucket 270

Rim diam.: 2.7; Max h.: 3

Thick flared rim, narrow neck, globular body, one handle attached below rim. Light brown ware (7.5YR6/4), many minute black grits, medium fired.

116 Juglet

Reg. No. A/71/B371; Area A, Sq. I2, Locus 614, Bucket 371

Rim diam.: 2.1; Max h.: 3.4

Thick flared rim, narrow neck, globular body, one lifted handle attached below rim. Light yellowish-brown ware (10YR6/4), many minute black grits, medium fired.

117 Juglet

Reg. No. 79/A/56/267; Area A, Sq. I7

Max h.: 16.5

Inverted ridged outside rim, short neck, rounded shoulder, flat base, handle from neck to shoulder. Pink ware (7.5YR7/4), hard fired.

118 Juglet

Reg. No. 79/Y/64/088; Area Y, Sq. 5, Bucket 77

Rim diam.: 3.5; Base diam.: 2.7; Max h.: 11.5

Wide ring rim, narrow neck, light indentation around neck. Fusiform body, high foot flaring toward flattened broad base. Handle attached from neck to shoulder. Light reddish-brown ware (5YR6/4), hard fired.

119 Juglet

Reg. No. 79/A/71/167; Area A, Sq. I3–I4, Bucket 272

Base diam.: 2.7; Max h.: 10

Fusiform body, high foot flaring toward flattened broad base. Handle attached to the neck. Light reddish-brown ware (5YR6/4), many small black grits, hard fired.

120 Juglet

Reg. No. 79/A/71/164; Area A, Sq. I4, Locus 1, Bucket 748

Base diam.: 2.7; Max h.: 9

Fusiform body, high foot flaring toward flattened broad base. Handle attached to the neck. Light reddish-brown ware (5YR6/4), many small black grits, hard fired.

121 Juglet

Reg. No. 79/C/65/589; Area C, Bucket 718

Base diam.: 3; Max h.: 7.8

Fusiform body, high foot flaring toward flattened broad base. Handle attached to the neck. Reddish-yellow ware (7.5YR7/6), wide red painted band below shoulder (2.5YR5/8). Many small black grits and few big gray grits, medium fired.

122 Small Jar

Reg. No. 79/A/56/269; Area A

Max h.: 13

Elevated shelf rim, short neck, carinated shoulder, flat base, two handles from shoulder to body. Pink ware (7.5YR7/4), hard fired.

123 Small Jar

Reg. No. 79/A/56/268; Area A

Max h.: 16.8

Inverted ridged outside rim, short neck, carinated shoulder, flat base, two handles from shoulder to body. Pink ware (7.5YR7/3), hard fired.

Dipping Juglets (Nos. 124–127)

Stern identified two main types of the dipping juglet (Stern 1982:121–122, figs 178–180).

A. Round Base (Stern Type 2a)

The rounded base Type A was attributed to a Cypriot origin since hundreds of juglets were recovered from 6th to 4th century BCE tombs in Cyprus (Stern 1982:122). This type appeared along the Phoenician coast in the 7th–6th centuries BCE (Bikai 1978:52). In Jaffa, a single Type A juglet was recovered with a flaring rim, low neck, and bag-shaped body (124). The missing base seems to be of a rounded shape. Stern identified its origin in 6th century contexts at Cypriot sites (Stern 1982:122). However, they appeared at the Coastal Plain as well as in the hinterland in late Persian sites. They were also found in mountain region sites such as Tell el-Ful during the 6th to 5th centuries BCE (Lapp 1978:92, fig. 60:9), in a refuse pit at Qedumim in Samaria dated to the 5th century BCE (Stern and Magen 1984:23, fig. 7:6–7), Ramat Rahel (Aharoni 1962, fig. 8:4), or at En-Gedi in the 4th century BCE (Stern 1982, photo. 178). In a storage room at Shiqmona, a huge number of complete juglets were recovered on floor level. Elgavish suggested that they could have been part of a group of perfume containers that belonged to a manufacture center of perfumes at Shiqmona (Elgavish 1968:25, fig. XXXIII:12). At Tel Mevorakh, the type was dated to the 2nd half of the 4th century BCE (Stern 1978:37–8, fig. 9:9–10).

Date range: 6th–5th cents. BCE

B. Flat Base (Stern Type 2b).

In Jaffa, a few flat base Type B juglets were found (125–127). They are characterized by a plain flaring rim, high flaring neck, bag-shaped body, and flat base. One lifted handle is attached from rim to neck base. Type B was in common use mainly at coastal and Galilean sites during the late Persian period. They probably were of local ware at that stage of development and appeared at Tel Qiri (Avisar 1987:20, fig. 5:14), Shiqmona (Elgavish 1968:25, pl. XXXIII:11), Tel Michal (Fischer 1989:124, 129, fig. 9.5:14), Apollonia (Tal 1999:126, 156, figs. 4.23:21; 4.38:10) and Yoqne'am (Cimadevilla 2005:420, fig. iv.17:2). At Dor, the flat base juglets were the most common type in the 4th century contexts (Guz-Zilberstein 1995:65, fig. 2.11:2–3). At Tel Mevorakh, a single juglet with ribbed body was found, which was dated to the late 4th century (Stern 1978:38, fig. 9:11). The Jaffa examples are rather similar in treatment and can be dated to the same period of time.

Date range: late 5th–4th cents. BCE

124 Dipping juglet

Reg. No. 79/A/72/128; Area A, Sq. L3, Locus 706, Bucket 39

Rim diam.: 4.3; Max h.: 14

Flaring rim, elongated body, traces of handle. Pink ware (7.5YR8/3), many small black grits, hard fired.

125 Dipping juglet

Reg. No. 79/Y/64/089; Area Y, Sq. 4, Locus 606, Bucket 59

Rim diam.: 4.7; Base diam.: 3.1; Max h.: 16

flaring rim, short flared neck, elongated body, flat base, handle attached from rim to shoulder.

Pink ware (7.5YR7/4), hard fired.

126 Dipping juglet

Reg. No. 79/A/73/111; Area A, Bucket 456

Base diam.: 3.4; Max h.: 14

Ribbed elongated body, flat base, traces of handle. Pink ware (7.5YR7/4), many small black grits, hard fired.

127 Dipping juglet

Reg. No. 79/B/60/026; Area B

Base diam.: 3.3; Max h.: 10

Cylindrical body, flat base. Very pale brown ware (10Y7/4–3), medium fired.

9.1.2.2. Hellenistic and Early Roman Juglets

Dipping Juglet (No. 128)

Flared rim and neck, cylindrical deeply ribbed body and knobbed base. The fabric is coarse cooking ware of medium firing. The shape is roughly made and asymmetrical. The antecedents of the type could be the Persian dipping juglets or the Early Hellenistic form with globular body and truncated base, which was common along the Coastal Plain and probably was of local manufacture.

In Jaffa, the Hellenistic antecedents are missing. One base fragment of the ribbed Early Roman type was found (128).

Similar ribbed complete juglets were found at a sealed locus in Dor and were considered the most common juglets of the Early Roman levels (Guz-Zilberstein 1995:322, fig. 6.49). At Shiqmona, too, this is the dominant juglet of the 1st–2nd century CE (Elgavish 1976:38, fig. XII:93, fig II:9–10). Its appearance in cistern contexts at both sites can be an indication for their function as drawing water juglets. Base fragments were found in an Early Roman context in Ramat Hanadiv (Silberstein 2003:428, pl. IV:4–5) and in the Jericho cemetery, where they were dated to the 2nd half of the 1st century CE (Killebrew 1999:121–2, fig. III.61:7–9).

Date range: 1st – early 2nd cents. CE

128 Dipping juglet

Reg. No. A/70/B349.2; Area A, Sq. L4, Bucket 349

Base diam.: 1.4; Max h.: 4

Globular body, knobbed base. Red ware (2.5YR5/6), many minute white and black grits, medium fired.

Phoenician Juglet (No. 129)

Globular juglet with plain rim flanged on its external face. The juglet is coated with a red dull slip on rim and neck. A similar type was found at Tel Anafa dated to 125 BCE (Berlin 1997:53, pl. 10:59). The type was identified as household juglets made of the typical Phoenician semi-fine ware. According to an analysis of the Tel Anafa assemblage, the ware was of Cypriot or Phoenician coast origin (Berlin 1997:9). The type was also found at Tel Kedesh and dated from the early 3rd to the mid-2nd century BCE (Berlin Pilacinski 2003:40, fig. 21). At Caesarea, similar ware juglets were recovered at the Early Roman level (Gendelman 2007:129, fig. 8.5:48). The appearance of the Phoenician ware in Jaffa is reasonable as well attested in the site architecture.

Date range: 3rd–2nd cents. BCE

129 Juglet

Reg. No. 79/A/56/150; Area A, Sq. I9

Rim diam.: 3.5; Max h.: 6.6

Rim with exterior ridge, narrow short neck, rounded shoulder, vertical loop handle from rim to shoulder.

Red ware (2.5YR6/6), dusky red wash on rim and neck (2.5YR4/4). Many small white grits, hard fired.

Semi-Fine Roman Cooking Juglets (Nos. 130–131)

Two fragments of semi-fine ware juglets were found in Jaffa. The first has a collared rim, low neck and carinated shoulder and the second is disc based. The ware is coarse and ribbed.

Date range: Early Roman

130 Juglet

Reg. No. C/61/B325.5; Area C, Sq. DD102, Bucket 325

Rim diam.: 3.3; Max h.: 4

Collared rim, low neck, one handle attached from neck to wide shoulder. Dark red ware (2.5YR4/8) and red core (2.5YR5/8). Many small white grits, hard fired.

131 Juglet

Reg. No. A/73/B559.2; Area A, Locus 752, Bucket 559

Base diam.: 2.5; Max h.: 3.5

Flat base, ribbed body. Yellowish-red ware (5YR5/8), many small black grits, medium fired.

9.1.3. Jugs

9.1.3.1. Hellenistic and Early Roman Jugs

Lagynoi (Nos. 132–134)

Table jug with long and slim neck, carinated body and one strip handle. The sources of the slender neck are connected with the original lagynos function. The lagynos was invented during the Ptolemaic period as a vessel that the racer in the Dionysian Festival carried full of wine without spilling any.⁴⁵

The first lagynos was probably produced in metal at Alexandria since they were common in areas under Ptolemaic rule such as Cyprus, southwestern Asia Minor, the southern Levant and Alexandria itself (Berlin 1997:43). In the Athenian Agora the lagynos was in common use during the 2nd half of the 2nd century BCE (Thompson 1933:405, fig. 92:E73; Rotroff 1997:225–231, pls.115–121). It is distinguished by fine reddish-yellow clay, thick creamy white slip and painted decoration. The distribution pattern is all over the Mediterranean with large concentrations around Pergamon. Local industries have been postulated in Cyprus, Argos, Samos, Israel, and North Africa (Rotroff 1997:225).

In Israel, the lagynos is missing at Judean and other Hasmonean sites. The connection with pagan religious festivals contributed to their appearance at Early Hellenistic pagan sites. The best example of the phenomenon is displayed in the Tel Anafa assemblage. 65 fragments of imported and local manufactured lagynoi were recovered from late Hellenistic 2B to Rome 1B contexts (98 BCE–early 1st cent. CE) (Berlin 1997:43–4). The Hellenistic lagynoi in Israel are very scattered. A few imported ones were found in Maresha (Levine 2003:106–7, fig. 6.12:116–117), Tel Anafa (Berlin 1997), and Dor (Guz-Zilberstein 1995:309–310, fig. 6.33:2–4, 12). The lagynos can be divided to two morphological shapes: broad based and narrow based.

In Jaffa, only local made lagynoi were recovered with a narrow base and high neck (133) and a fragment of red slipped rim with unique flattened rim and pointed edges (132). At Dor, similar rim was attributed to a jug of Eastern origin dated from the 3rd to the 2nd century BCE (Guz-Zilberstein 1995:308, fig. 6.29:12). At Tel Anafa, a similar rim shape was identified as a semi-fine Early Roman lagynos (Berlin 1997:47, pl. 7:PW37). Thus the rim from Dor can be attributed to a lagynos or jug. Local made lagynoi, plain or red slipped, were found in large quantities in Dor at loci dated to 175–125 BCE (Guz-Zilberstein 1995:310, fig. 6.33:7). Rim fragment no. 134 was also found at other pagan sites such as Caesarea (Gendelman 2007:52, fig. 4.5:33–34), Ashdod (Dothan 1971:49, fig. 11; 22, fig. 2:12) Yoqne‘am (Avissar 1996:57, fig. X.7:9), Maresha (Levine 2003:106–7, fig. 6.12:118–9), and Tel Anafa (Berlin 1997:45–6, pl. 7:PW24–27). The above data suggests that the coarser ware, carinated lagynoi, were common from the late 2nd century BCE until the early 1st century CE.

Date range: late 2nd–1st cents. BCE

132 Lagynos

Reg. No. 79/J/70/073; Area J, Locus 1, Bucket 12

Rim diam.: 4.5; Max h.: 2.5

Inverted rim, flanged at outer face, narrow neck, flattened handle attached from rim. Reddish-yellow ware (5YR7/6), reddish-yellow core (5YR6/8), a few small black grits, medium fired.

133 Lagynos

Reg. No. 79/C/82/600; Area C

Base diam.: 7.5

Carinated walls, high ring base. Pink ware (7.5YR8/4), many small black grits, medium fired.

⁴⁵ Athenaeus (xi. 499) in Berlin 1997:42.

134 Lagynos

Reg. No. A/73/L752.6; Area A, Locus 752

Rim diam.: 3.5

Plain rim, high neck, one handle rising above rim. Reddish-brown ware (5YR5/3) and yellowish-red core (5YR4/6), a few minute black grits, medium fired.

Flared Rim Jugs/Pitchers (Nos. 135–146)

Flared rim with internal groove or rolled lip, flaring averaged neck, globular body and omphalos or ring base. One handle rising from rim, sometimes above rim, and attached to shoulder. The form probably functioned as a dipping jug for pouring liquids. Their wide distribution at Judean sites is an indication for their origin. However, Berlin suggested that the uniform well levigated light orange-brown fabric probably derived from a single Judean production center (Berlin 1997:144). In contrast to Berlin's note that "None are known from sites north of Samaria," the type is well known along the Coastal Plain from the 2nd century BCE until the mid-1st century CE.

In Jaffa, a wide range of jugs made of various plain wares was found. They can be divided into three chronological-morphological subtypes.

A. Wide Neck (Nos. 135–138)

The fabric is light colored (10YR7/3–8/3), medium fired. The rim flares out sharply and the neck is relatively wide. The body is globular with ring base (135–137). The earliest example in Jaffa has a wide neck and a thick flared rim (136). Similar examples were dated to the 2nd century BCE in Yoqne'am and Dor (Avisar 1996:57, fig. X.7:4–5; Guz-Zilberstein 1995:309, fig. 6.31:1–11). In Jerusalem, the type appeared from the mid-2nd to the 1st century BCE in the Jewish Quarter (Geva 2003:118, fig. 5.10:12, 5.6:15) the Temple Mount (Mazar 1971:31, pl. 17:14), and the City of David (Berlin 2012:13, fig. 2.3:1–8). The type was most common throughout the Jerusalem vicinity and also in the Hasmonean contexts in Jericho (Bar-Nathan 2002:38, pl. 8:52–55), Machaerus (Loffreda 1996:56–7, fig. 20:9), Gezer (Gitin 1990:242, pl.34:26), Qumran, Shechem, and Beth-Zur (Lapp 1961:158, Type 21.1f–h) and Masada until 6 CE (Bar-Nathan 2006:99–100, pl. 18:5). At Tell el-Ful the type was the most popular at the end of 2nd century BCE (Lapp 1978:102–3, pl. 75:1–21).

Date range: mid-2nd cent. BCE

B. Medium Size Neck (Nos. 139–145)

The fabric is darker, thinner and ribbed with a metallic ring. The rim has an internal groove, the neck becomes narrower and the body is piriform. The base tends to be concaved or omphalos rather than ring base.

Type B1 (139–142). At the close of the 2nd century the type become less globular and more piriform with a ring base. In Jaffa, two complete jugs were found (139, 142) that can be dated to the 1st century BCE according to parallels from Masada (Bar-Nathan 2006:100–4, pl. 18:7–10), Bethany (Saller 1957:294, fig. 61:1763, 1889), Jericho (Kelso and Baramki 1955:24–5, pl. 22:x21; Bar-Nathan 2002:38, pl. 8:52–55), Armenian Garden in Jerusalem (Tushingham 1985:54, fig. 21:9–12) and 'En Boqeq (Fischer and Tal 2000:38, fig. 2.8:10–18). Above the late 2nd century BCE floor in the store room in Shiqmona, a complete similar type of jug was found within an assemblage of 11 intact vessels (Elgavish 1974:31, pl. XV:228). At Ashdod, the same type was dated to the 1st century BCE (Dothan 1971:56, fig. 17:1).

Type B2 (143–145). During the 1st century BCE and until the 1st century CE the neck becomes narrower and the rim more flared. In Judea, the late type made of dense ribbed ware appeared in large amounts and in several ware types. The type was found in the Jerusalem vicinity during the 1st century BCE near the Temple Mount (Mazar 1971, pl. 17:14), Bethany (Saller 1957: 294, fig.61:1763,1889), Tell el-Ful (Lapp 1978:102, pl. 75:22–26), Herodium (Bar-Nathan 1981:58, pl. 4:7) and the Jewish Quarter in Jerusalem (Geva 2003:127, fig. 5.2; 36, 5.8:16). In the 1st century CE they appeared in the Armenian Garden in Jerusalem (Tushingham 1985:54, figs. 19:25–6; 21:9–20; 23:3), Shepherd's Field (Tzaferis 1975:89, fig.3:7), and were the most common type in Masada (18%) and Jericho (Bar-Nathan 2002:156–7 pl. 25:423; 2006:100–104, pl. 18–19:11–16).

Date range: late 1st cent. BCE to 1st cent. CE

C. Narrow Neck (No. 146)

The body and neck became narrower. Similar examples were dated in Masada to the mid-late 1st century CE (Bar-Nathan 2006:104, pl. 19:17–18).

Date range: mid-1st cent. CE

135 Jug

Reg. No. 79/A/72/120; Area A, Locus 752, Bucket 396

Rim diam.: 6; Base diam.: 6; Max h.: 13

Collared rim, globular body with shallow ribs, rounded base slightly concaved, loop handle attached from rim to shoulder. Pink ware (7.5YR7/3), few small white grits, hard fired.

136 Jug

Reg. No. A/70/B360.4; Area A, Sq. L3, Bucket 360

Rim diam.: 9; Max h.: 9.5

Flaring rim, medium neck, lifted handle rising above rim attached from rim to wide shoulders. Very pale brown ware (10YR7/4) and light gray core (10YR7/2). Many minute white and black grits, soft fired.

137 Jug

Reg. No. 79/D/63/070; Area D, Bucket 44

Rim diam.: 9; Max h.: 8.5

Flaring rim, grooved at lip, medium neck, lifted handle rising above rim attached from rim to wide shoulders. Very pale brown ware (10YR7/3–4), many small black grits, hard fired.

138 Jug

Reg. No. C/61/B617.4; Area C, Sq. CC100, Locus 433, Bucket 617

Rim diam.: 9; Max h.: 4.5

Flared rim, broad neck. Pinkish-gray ware (7.5YR6/2), hard fired.

139 Jug

Reg. No. 79/H/64/026; Area H, Sq. 1, Locus 402, Bucket 9

Rim diam.: 9.4; Base diam.: 7; Max h.: 18.5

Flaring rim, grooved at lip, flared neck, globular body, ring base. Dusky red ware (2.5YR4/4), a few large white grits, hard fired.

140 Jug

Reg. No. C/61/605; Area C, Sq. CC100, Locus 433, Bucket 622

Rim diam.: 7; Max h.: 10

Flaring rim, grooved at lip, flared slightly ribbed neck, lifted handle rising above rim attached from rim to wide shoulders. Very pale brown ware (10YR7/4), many small white grits, soft fired.

141 Jug

Reg. No. C/61/613; Area C, Sq. CC100, Locus 433, Bucket 616

Rim diam.: 8.5; Max h.: 8

Flaring rim, medium size ribbed neck. Reddish-yellow ware (5YR6/6), many small white and black grits, medium fired.

142 Jug

Reg. No. 79/C/61/435; Area C, Sq. DD101, Locus 428

Rim diam.: 12; Base diam.: 6; Max h.: 27.5

Outcurved and flattened rim, short neck, rounded shoulder, rounded ribbing body, ring base, handle from rim to shoulder. Weak red ware (2.5YR5/4), hard fired.

143 Jug

Reg. No. C/61/B634; Area C, Locus 433, Bucket 634

Rim diam.: 7.5; Max h.: 6

Flared rim, grooved at lip. Light reddish-brown ware (2.5YR6/4), hard fired.

144 Jug

Reg. No. 79/A/56/176; Area A, Sq. I7

Rim diam.: 9; Max h.: 6.2

Flared rim and neck. Very pale brown ware (10YR7/3) and reddish-yellow core (5YR6/6), many minute white and black grits, hard fired.

145 Jug

Reg. No. A/70/B264; Area A, Sq. L3, Bucket 264

Rim diam.: 9; Max h.: 4.2

Flared Rim and neck. Reddish-yellow ware (5YR6/6), many minute black grits, hard fired.

146 Jug

Reg. No. A/72/B430.1; Area A, Locus 752, Bucket 430

Rim diam.: 3; Max h.: 3

Ledged rim. Dark red ware (2.5YR4/8), a few small white grits, medium fired.

Table Jugs

A. Flared Rim and Neck (Nos. 147–148)

In Jaffa, two rim fragments were found (147–148). At Tel Anafa, a similar type was identified as a Hellenistic/Roman local jar (Berlin 1997:153, 160, pl. 64:PW515). However, according to parallels in Caesarea the type can be identified as a 2nd century BCE table jug (Gendelman 2007:51, fig. 4.4:27).

Date range: 2nd cent. BCE

B. Outcurved Rim (Nos. 149–150)

Thick triangular rim turning downward at external lip. Heavy neck and globular body. Two handles attached from neck to shoulder.

The table amphora was very common within pagan sites during the Late Hellenistic period. The eastern Mediterranean type based on a Greek prototype (Berlin 1997:37) was manufactured in the Phoenician region from the mid-2nd century BCE and until the early 1st century BCE (Levine 2003:99, fig. 6.9:87). One rim fragment found in Jaffa (150) is similar to Early Roman examples from Caesarea (Gendelman 2007:50, fig. 4.4:24), Maresha (Levine 2003:99, fig. 6.9:87), Tel Anafa (Berlin 1997:38–39, pl. 1:1–5), and Yoqne‘am (Ben Tor et al. 1978, fig. 7:15; Avissar 1996:57, pl. X.7:2). The Early Roman type is characterized by a narrower neck and a less angled rim, and can be identified as a jug rather than an amphora.

One rim of the local table jug was found in Jaffa (149). The sporadic evidence makes it almost impossible to characterize the frequency and use of that kind of jug in Jaffa. The samples in Jaffa are probably of Early Roman period with a narrower neck. At Caesarea, similar examples were found dated from the late 1st century BCE to the mid-1st century CE (Gendelman 2007:126, fig. 8.4:32–34).

Date range: Early Roman

C. Semi-Fine Ware (Nos. 151–152)

In the Pool in Area A in Jaffa within the Late Roman assemblage, a complete table jug typical of the Early Roman period was found (151). The jug is characterized by semi-fine ware, thick rounded rim, ribbed on its external face, high neck, piriform body and an omphalos base. The lower part of body is ribbed. Two loop handles are attached from below the rim to the shoulder. The type was dated in Machaerus to 30 BCE–72 CE (Loffreda 1996:54, Group 18, Early Roman). At Maresha, similar jugs were found within the Early Roman context (Levine 2003:45, fig. 2.8:1–2).

Date range: late 1st cent. BCE–late 1st cent. CE

147 Table jug

Reg. No. C/61/B436; Area C, Bucket 436

Rim diam.: 15; Max h.: 8.5

Flared neck with deep ribs on external mid face and flared rim. Pale red ware (2.5YR7/3) and dark reddish-gray core (2.5YR5/1), many big white grits, hard fired.

148 Table jug

Reg. No. 79/Y/68/298; Area Y, Sq. Z14, Locus L-12, Bucket 58

Rim diam.: 22; Max h.: 3.5

Thickened and folded rim with hanging down lip, sharply ribbed wall. Light reddish-brown ware (5YR6/4) and red core (2.5YR5/6), many big white grits, hard fired.

149 Table jug

Reg. No. C/61/B622.3; Area C, Sq. CC100, Locus 433, Bucket 622

Rim diam.: 13; Max h.: 5

Flared rim with hang down lip, broad neck, two handles attached from mid neck. Pink ware (5YR7/4), many minute black grits, medium fired.

150 Table jug

Reg. No. A/72/B29.1; Area A, Sq. K3 L4, Locus 704, Bucket 29

Rim diam.: 12.5; Max h.: 2.6

Flared neck with down folded rim. Pink ware (5YR7/4), many minute black grits, medium fired.

151 Table jug

Reg. No. A/73/B397; Area A, Locus 752, Bucket 397

Rim diam.: 7

Heavy collared rim, ribbed on external face, high neck, bi-conical body and omphalos base. Yellowish-red ware (5YR5/6), small many black grits, medium fired.

152 Table jug

Reg. No. A/73/B561; Area A, Locus 752, Bucket 561

Rim diam.: 4.6; Max h.: 9

Plain rim, high neck, one handle attached from neck to wide shoulder. Reddish-yellow ware (5YR6/6), many small white and black grits, medium fired.

D. Miscellaneous Jugs (Nos. 153–155)

Three unclassified jugs were found in Area C (153), Area A (154), and Area T (155).

153 Jar

Reg. No. C/61/B640.1; Area C, Sq. DD102, Locus 432, Bucket 640

Rim diam.: 10; Max h.: 2.5

Folded rim, high neck ridged at mid way. Pink ware (7.5YR7/3), many white and black grits.

154 Jug

Reg. No. A/70/B345; Area A, Sq. K3, Bucket 345

Rim diam.: 11; Max h.: 7.8

Flared rim, wide neck, rounded wall. Pink ware (7.5YR7/4, 8/3), reddish-brown slip on external upper part (5YR4/4). Many small black and a few small red grits, hard fired.

155 Jug

Reg. No. 79/T/62/047; Area T, Bucket 9

Rim diam.: 10; Max h.: 6/5

Everted rim, carinated shoulders with two incision below shoulder. Reddish yellow ware (5YR7/6–6/8). External very pale brown wash (10YR8/4). Many large black and white grits. Hard fired.

Cooking Ware Jugs

The cooking ware jugs functioned for cooking and food making at the domestic kitchen. The Talmudic and Mishnaic sources associated those jugs with water boiling (Bar-Nathan 1981:n. 25). They are made of various

coarse or cooking fabrics and are all undecorated. Cooking ware jugs are very common in household assemblages throughout the Roman Mediterranean sites. Their frequent appearance in well and cistern deposits is an indication of their use for carrying water (Berlin 1997:144).

From a morphological point of view the cooking ware jug was developed from the flared-rim Hellenistic jug, which represents a gradual evolution in shape and fabric. The body is ribbed, the ware is thinner and finer, and it acquired the characteristic metallic ring. The transition occurred, as the parallels prove, at the turn of the 1st century CE.

Regarding source and origin, the distribution pattern points to Judea as the center of production. For example, at Machaerus the Judean spherical juglets appear (253–264) beside the flared rim jugs (136–146) and cooking ware jugs (156–162), at same levels dated to the Early Roman period (Loffreda 1996:55–68). At Givat Ram (Jerusalem) a potter workshop was recently found where cooking ware jugs were manufactured together with cooking pots (Arubas and Goldfus 1995:95).

Bar-Nathan described the one-handled cooking jug in Jericho as “an innovation of the Herodian potter around 31 BCE” (Bar-Nathan 2002:68). She identified the cooking jug as the *Yorah* (יורה) and *Kumkumin* (קומקום) for boiling and heating water of the Mishnaic and Talmudic period. On the other hand, their distribution in other parts of Israel, especially the Coastal Plain and the Galilee, can suggest additional sources. Fernandez, in his research throughout the Roman Galilee, strengthens the connection between the cooking ware jug and Jewish settlements there (Fernandez 1983:114).

The appearance of the cooking jug in Jaffa suggest again the substantial presence of Jewish inhabitants at the site.

A. Ridged Neck (Nos. 156–158)

Flared rim with high narrow neck ridged below rim, globular body, and one handle attached from rim to shoulder.

The ridged rim jug developed from the cup-like jug that was the most common jug/juglet of the Second Temple period. At the end of Herod’s reign (15 BCE–6 CE) it went out of use and was replaced in the 1st century CE by the ridged rim jug (Bar-Nathan 2002:43, 158–9, pl. 25:429; Lapp 1961:160, Type 21.1).

In Jaffa, the transitional type was found with a pseudo cup-like rim ridged at the lower external rim (156). Similar fragments were recovered in Jericho dated to the 1st century BCE (Bar-Nathan 2002:42–3, pl. 9:76–71).

Another fragment in Jaffa represents the ridge neck juglet (157). The ridge is rather close below the rim and can be paralleled to the Qumran type dated to 50–31 BCE (Lapp 1961, Type 21.1b). The 1st century CE type displays the ridge at the center of the neck (Lapp 1961:160, Type 21.1c) although earlier examples with a ridge at the center of the neck were found in a 3rd–2nd century BCE context in Maresha (Levine 2003:106, fig. 6.12:114–115). At Masada, the type is the third most common and displays three stages of development from the late 1st century BCE until the 1st century CE (Bar-Nathan 2006:107, pl. 19:25–26). In the Jericho cemetery, numerous examples were found in the mourning enclosure in the *miqveh*, dated to the 2nd half of the 1st century CE (Killebrew 1999:121–2, fig. III.61:7–9). Another example was found in the Judea region in Qumran, Bethany (Lapp 1961:160, Type 21b,c), and Jerusalem (Mazar 1971:31, pl. 18:21; Avigad 1983:122). In the Jericho palaces, a whole jug was found in a pottery kiln in the industrial area dated to the 1st half of the 1st century CE (Bar-Nathan 2002:158, pl. 25:429). On the Coastal Plain, similar juglets were found at Shiqmona dated from the 2nd to the 3rd century CE (Elgavish 1976: 20, fig. XII:99–101). The ridged neck juglets are widespread in the Galilee from the 1st to the 4th century CE. None of the examples displayed in the Fernandez catalog of Roman Galilean Ware are similar to the Jaffa type. However, they belong to the same type made in the Galilean workshops, probably with relation to the Jewish settlements in northern Israel (Fernandez 1983:116, 150; Type 9.2).

Date range: 1st cent. BCE to 1st cent. CE

B. Flanged Rim (Nos. 159–161)

Collar rim flanged at external lower lip, flaring average neck, globular body, one handle attached from rim to shoulder, rounded base. This type is most common in Israel from the 1st century BCE to the 1st century CE. The type is a later development of the “Flared Rim Hellenistic Jug” with a wider neck and rim.

In Jaffa, the later development examples with narrower neck were found (159–161). A similar type appears throughout the Judean region. At Jericho, the type is dated to the 1st century CE (Bar-Nathan 2002:177–8, pl. 27:504–505). At Herodium, the type appears with a rounded base that indicates its probable function for water boiling (Bar-Nathan 1981:59, pl. 4:14–16). It also appears at Machaerus (Loffreda 1996:63–64, fig. 24:1–6), Masada (Bar-Nathan 2008:174 pl. 31:85–89), Oboda (Negev 1986:117, no. 1022), and in Jerusalem (Mazar 1971:31, pl. 18:18) until the 2nd century CE (Tushingham 1985:63, fig. 25:8).

The type continued to appear during the Mid Roman period at coastal sites such as Ramat Hanadiv and Shiqmona (Silberstein 2000:426, pl. III:19, 27; Elgavish 1976:19, fig. XII:94–97). The later examples occurred in the 3rd and 4th centuries CE in northern Israel in Magadala, Nazareth, and Jalame (Fernandez 1983:117, 151, Type 9.5; Johnson 1988:205, fig. 7–45:672–3).

Date range: 1st–2nd cents. CE

156 Jug

Reg. No. C/65/B1016.2; Area C, Sq. CC103, Bucket 1016

Rim diam.: 5; Max h.: 4

Flaring rim ridged below lip, one handle attached from rim. Light reddish-brown ware (5YR6/4) and gray core (5YR5/1). Many small white and black grits, hard fired.

157 Jug

Reg. No. 79/G/64/011; Area G, Sq. 27, Bucket26

Rim diam.: 4; Max h.: 6

Flaring rim, narrow neck, ridged sharply below rim, one handle attached from rim to wide shoulder.

Light reddish-brown ware (5YR6/4) and gray core (5YR5/1). Many small white and black grits, hard fired.

158 Jug

Reg. No. C/61/B417; Area C, Sq. DD102, Bucket 417

Rim diam.: 4.4; Max h.: 5.5

Flaring rim, narrow neck, ridged sharply below rim, one handle attached to the rim. Reddish-gray ware (5YR5/2), light reddish-brown core (5YR6/3), many small white grits, medium fired.

159 Jug

Reg. No. C/61/B484; Area C, Sq. DD101, Bucket 484

Rim diam.:3.8; Max h.: 6

Collar rim, flanged at outer face, high neck widening toward shoulder, one handle attached from rim to neck. Yellowish-red ware (5YR5/6), many minute black grits, medium fired.

160 Jug

Reg. No. C/65/B907.4; Area C, Sq. CC103, Bucket 907

Rim diam.: 4; Max h.: 5

Collar rim, flanged at outer face, high neck, one handle attached to rim. Yellowish-red ware (5YR5/6), many minute black grits, medium fired.

161 Jug

Reg. No. 79/G/64/018; Area G, Sq. 29, Bucket 88

Rim diam.: 4.7; Max h.: 2.2

Collar rim, flanged at outer face, high neck, one handle attached to rim. Red ware (2.5YR5/6), many small white grits, hard fired.

9.1.3.2. Late Roman and Byzantine Jugs

Trefoil Mouth

A. Narrow Mouth (Nos. 162–164)

Trefoil rim, curved on external face, low and narrow neck, wide shoulder. One handle attached from rim to shoulder. A few rim fragments were found in Jaffa and can be dated according to parallels from Magdala (Fernandez 1983:117, fig. 152:9.7) and Caesarea (Tomber 1999:307, fig. 1:29) to the Late Roman period.

B. Wide Mouth (Nos. 165–166)

The first fragment with wide open flared trefoil mouth, flared neck grooved at middle, globular body and molded base. One lifted handle with ribbed profile is attached to rim and rises above mouth (165). The second fragment has a flared trefoil mouth and narrower neck grooved at lower part (166). Probably part of globular jug made of fine cooking ware.

That type is well known in the Athenian Agora at levels dated from the 2nd to the 3rd century CE. The lifted ribbed handle that characterizes the Jaffa example (165) is dated in the Athenian Agora to the mid-3rd century CE (Robinson 1959:99, pl. 25:M164–168), while the molded concave base appears in a late 2nd to early 3rd century CE example (Robinson 1959:93, pl. 23:M101). An identical example was dated in Caesarea to the 1st century CE (Oleson 1994:94, fig. 28:C29). However, the prototype had already been developed in the Late Hellenistic period as suggested by examples from Samaria (Crowfoot et al 1957:269, fig. 58:7) and probably continued until the 4th century CE (Gichon 1993:152, pl. 26:1–3 – ‘En Boqeq; Tzaferis 1975:35, pl.17: Type 9,1–3 from the Shepherd’s Field). In Benghazi, a similar jug was dated to the 2nd–3rd centuries CE (Riley 1979:384, fig. 138.1145; 385, fig. 138.1146).

Date range: Late Roman

162 Jug

Reg. No. 79/G/64/015; Area G, Sq. 29, Bucket 72

Rim diam.: 3; Max h.: 4

Trefoil rim, widening neck, thickened and ridged below rim, one handle attached from neck to shoulder. Red ware (2.5YR5/6) and dusky red core (2.5YR4/4), a few big white grits and many small black grits, medium fired.

163 Jug

Reg. No. 79/G/64/013; Area G, Sq. 29, Bucket 72

Rim diam.: 3.5; Max h.: 7

Trefoil rim, widening down neck, ridged below rim, one handle attached from neck to shoulder. Red ware (2.5YR 5/6), many small white and black grits, hard fired.

164 Jug

Reg. No. C/65/624; Area C, Bucket 815

Rim diam.: 3; Max h.: 5.5

Collar rim with trefoil mouth, narrow neck, one handle attached to rim. Dark reddish-gray ware (5YR4/2) and dark red core (2.5YR4/6), many small white and black grits, hard fired.

165 Jug

Reg. No. C/61/615; Area C, Bucket 666

Rim diam.: 9; Base diam.: 5

Flared rim and neck with external grooves, trefoil mouth, omphalos base, one handle attached to below rim. Yellowish-red ware (5YR5/6), a few small white grits, hard fired.

166 Jug

Reg. No. C/61/966; Area C, Sq. CC103, Locus 451, Bucket 966

Rim diam.: 6.8; Max h.: 5.8

Flared rim and neck with external grooves, trefoil mouth. Very pale brown ware (10YR7/4), reddish-yellow core (7.5YR6/6), many minute black grits and gold mica, medium fired.

Utilitarian Jugs

In Jaffa, a large assemblage of cooking jugs of diverse shapes was recovered at the pool in Area A. They were found beside a group of complete water-wheel jugs and probably can suggest the function of the pools as water storage. The fabric is the uniform cooking ware, typical of the Late Roman and Byzantine local repertoire. The ware is hard fired with a metallic ring, dark red color with many black and white inclusions. The body has dense ribbing and the base usually concaved created a pseudo ring or ompholos base. At the Royal Ontario Museum Catalog the ware was identified by Hayes as Palestinian ware, typical of the Late Roman period (Hayes 1976:60–61). The Jaffa assemblage can be divided into three subtypes of drawing water jugs.

A. The Pyramidal Body (Nos. 167–169)

Plain rim, low flared neck, pyramidal body and ompholos base. One handle attached from rim to below neck. The body is deeply ribbed.

The two complete jugs in Jaffa were recovered from the pool (167–168). A similar shaped fragment made of coarse ware was found in Ramat Hanadiv and dated to the 6th century CE. The coarse unribbed ware is an indication of a type manufactured in many regional centers along the Coastal Plain (Calderon 2000:147, pl. XXIV:69). A ribbed example from Jalame was dated to the Late Roman period (Johnson 1988:207, fig. 7–46:697). At Beth-Shean, three complete examples were found near a Byzantine cistern (Fitzgerald 1931, fig. 30:22–24). At Caesarea, similar jugs were found within wells located in the storage region (Area KK).⁴⁶

B. Broad Shoulder and Neck (Nos. 170–178)

Ribbed jugs of various sizes with a thickened rim, broad neck and shoulder and concaved/ompholos base. One handle attached from rim to shoulder. The form can be considered a derivation of the fine Hellenistic flared rim jug that, toward the Early Roman period, was used as cooking ware, and the Byzantine version was probably its last stage of development. The shape presents a kind of simplicity with a plain thickened rim, wide neck, and ompholos base that replaced the ring base.

The distribution pattern strengthens the assumption that the cooking ware jug was used in all kinds of contexts including burial and public structures in Late Roman and Byzantine sites in Israel. However, it is interesting to see that many of the contexts are funerary besides those of wells and cisterns. The first two trefoil mouth jugs (170–171) were found in Beth She'arim tombs (Avigad 1983:fig. 94:5–6) as well as in the Coastal Plain at Caesarea (unidentified level) (Oleson 1994:123, fig. 45:C42) and in the Byzantine level at Ramat Hanadiv (Calderon 2000:147, pl. XXIV:72). The next two jugs (172–173) were also found at Beth-Shean in a Byzantine cistern (Fitzgerald 1931, fig. 30:8,13) and at the Hammat Gader baths dated from the 6th to the 8th centuries CE (Ben Arie 1997:377, pl. XIV:18–21). At Caesarea, the type was dated to the 3rd to 4th centuries CE (Tomber 1999:307, fig.1:28; Bar-Nathan 1986:163, fig. 2:10), and in Nazareth (Bagatti 1967:271, fig. 220:11) and Jerusalem (Crowfoot and Fitzgerald 1929: pl. XV:29; Hayes 1976:61, fig. 36:328) to the Late Byzantine period. The two jug bases seem to be from the Late Roman–Byzantine period and can be paralleled with those from Caesarea (Blakely 1987:65, fig. 40:49; Oleson 1994:123, fig. 54:C44), and Ramat Hanadiv (Calderon 2000:147, pl. XXIV:72). In a single large jug, the lower part seems similar to the Jalame mid-4th century CE examples (177) (Johnson 1988:207, fig. 7–47:705, 709).

⁴⁶ According to the author's knowledge, as a member in the combined expedition to Caesarea during the years 1996–1998.

C. Ridged Neck (No. 179)

Flaring rim, ridged neck globular body, omphalos base. One handle attached from rim to shoulder. This type probably belonged to the former one but was developed earlier, according to parallels from Capernaum in the Early Roman period (Loffreda 1974:36, fig. 4:7–10).

At Hammat Gader, the ridged jug was attributed to the Umayyad period according to parallels from Transjordan (Ben Arieh 1997:377, pl. XIV:19–21). A similar type was found at a Beth-Shean Byzantine cistern (Fitzgerald 1931, fig. 30:8).

D. Pseudo Olpe (No. 180)

The Olpe type was common during the Classical period and continued to be manufactured at Cyprus and Phoenicia during the Hellenistic period. The type was found in Israel at Tel Anafa, Dor, Caesarea, Kedesh, and also in Cyprus (Berlin and Pilacinski 2003:222, fig. 6:106–109). During the Roman period the type was imitated as a cooking ware jug, probably as a utilitarian vessel or drawing jug. Similar jugs were found at the Byzantine level in Herodium (Bar-Nathan 1981:77, pl. 12:16) and Beth-Shean (Fitzgerald 1931:38, fig. 30:22–24).

E. Strainer Jug (No. 181)

Single spout jug was found that was probably part of a strainer jug. Similar spouts were found in a 1st century context at Masada (Bar-Nathan 2006:110, pl. 21:46–53) and at Jalame (Johnson 1988, fig. 7–47:712–713).

Date range: Byzantine

167 Jug

Reg. No. 79/A/72/162; Area A, Bucket 496

Rim diam.: 7.8; Base diam.: 5.3; Max h.: 16.5

Everted pinched rim, ribbed body, small concave base, vertical loop handle from rim to shoulder. Dark red ware (2.5YR4/6), hard fired.

168 Jug

Reg. No. 79/A/72/163; Area A, Locus 752, Bucket 480

Rim diam.: 8; Base diam.: 5.5; Max h.: 16

Everted rim, ribbed widening body, small ribbed concave base, loop handle. Dark reddish-gray and dusky red ware (2.5YR4/2–4/1), dark red core (2.5YR4/8). A few small volcanic grits, hard fired.

169 Jug

Reg. No. A/73/B652.3; Area A, Locus 752, Bucket 652

Rim diam.: 11; Max h.: 14

Everted rim, widening body, loop handle attached from rim to body. Red ware (2.5YR5/8), few minute white grits and many minute black grits, many minute volcanic grits, medium fired.

170 Jug

Reg. No. 79/A/72/171; Area A, Bucket 450

Rim diam.: 5; Base diam.: 4.7; Max h.: 12

Thickened rim with outer ridge below it, cylindrical neck, rounded shoulder, ribbed body narrowing downward, flat base slightly concaved, traces of vertical loop handle from rim to shoulder. Reddish-brown ware (5YR5/3), many small white grits, hard fired.

171 Jug

Reg. No. 79/A/72/167; Area A, Locus 752, Bucket 460

Rim diam.: 6; Base diam.: 5.3; Max h.: 15

Thickened rim with outer ridge below it, cylindrical neck, rounded shoulder, ribbed body, narrowing toward downward, small concave base, traces of handle. Reddish-yellow ware (5YR6/6), many small white and few minute black grits, hard fired.

172 Jug

Reg. No. 79/A/72/164; Area A, Locus 752, Bucket 490

Rim diam.: 8.3; Base diam.: 6.5; Max h.: 19.2

Flattened thick rim, wide cylindrical neck, rounded shoulder, ribbed body, concave base, vertical loop handle from rim to shoulder. Eroded surface with red ware (2.5YR5/6), many minute white grits, medium fired.

173 Jug

Reg. No. 79/A/72/166; Area A, Locus 752, Bucket 460

Rim diam.: 6.7; Base diam.: 5.2; Max h.: 16.5

Thick flared rim, cylindrical neck, rounded shoulder, ribbed body, concave base, vertical loop handle from rim to shoulder. Red ware (2.5YR5/6), many small white and black grits, hard fired.

174 Jug

Reg. No. A/73/B652.2; Area A, Locus 752, Bucket 652

D max: 15

Flared neck, ribbed cylindrical body, handle attached to broad shoulder. Light reddish-brown ware (5YR6/4), hard fired.

175 Jug

Reg. No. A/73/B545; Area A, Locus 752, Bucket 545

Rim diam.: 8; Max h.: 8.5

Thickened rim, broad neck and shoulder, handle attached from rim to shoulder. Reddish-yellow ware (5YR6/8) and yellowish-red core (5YR5/6), many medium white and black grits, medium fired.

176 Jug

Reg. No. A/73/B580; Area A, Locus 752, Bucket 580

Rim diam.: 10; Max h.: 9

Plain rim, slightly concaved neck, handle attached from rim to shoulder. Yellowish-red ware (5YR5/8; 5/6), many small white and black grits, medium fired.

177 Jug

Reg. No. 79/A/72/175; Area A, Locus 752, Bucket 505

Base diam.: 11.6; Max h.: 25.5

Rounded shoulder, ribbed body narrowing downward, ribbed ring base, traces of handle on shoulder. Reddish-yellow ware (7.5YR6/6) and brown core (7.5YR5/4). Many small white and black grits, hard fired.

178 Jug

Reg. No. 79/A/72/172; Area A, Locus 753, Bucket 595

Base diam.: 3.7; Max h.: 12.6

Rounded shoulder, ribbed body narrowing downward, concave base, traces of loop handle. Red ware (2.5YR6/6), many minute and small white grits, hard fired.

179 Jug

Reg. No. 79/A/72/165; Area A, Locus 752, Bucket 451

Rim diam.: 6.8; Base diam.: 4; Max h.: 17

Everted rim creating internal tunnel, cylindrical neck, rounded shoulder, spheroid ribbed body, small concave base, vertical loop handle from rim to shoulder. Red ware (2.5YR6/6), many minute black grits.

180 Jug

Reg. No. 79/A/73/160; Area A

Base diam.: 4.3; Max h.: 11.2

Ribbed cylindrical body, concave base (eroded). Very pale brown ware (10YR7/4), many small black and a few small red grits, hard fired.

181 Jug

Reg. No. C/65/626; Area C, Sq. DD103, Locus 441, Bucket 892

Remains of ribbed low spout. Light reddish-brown ware (5YR6/4) and reddish-yellow core (5YR6/6). Many minute black grits, medium fired.

9.1.4. Flasks

Flasks are small containers for carrying water or other liquids during land transport. The body is flattened on one side for hanging it more comfortably over the shoulder or tying it to the side of the person or animal carrying it (Berlin 1997:140). The flask can be traced back to the Late Bronze and Iron Ages “Pilgrim’s Flasks,” particularly in the south Judean tradition.

9.1.4.1. Persian Flasks

Low Neck (No. 182)

Flared rim, low neck flaring toward broad shoulders. The body is relatively bulky and large, made of two parts connected by a concentric band. Two low handles attached from below rim to shoulders. The form was classified by Stern as Type 2 and attributed to a Judean origin, typical of the mid-6th to the early 4th century BCE (Stern 1982:117, photo 167 with full references).

A single fragment was found in Jaffa (182). At Gezer, a quite similar handleless fragment was found that was identified as a jug or flask and dated to the 5th–4th centuries BCE (Gitin 1990:232, pl. 29:23). Another example with a slightly higher neck was attributed at Tel Michal to a 430–400 BCE context (Singer-Avitz 1989:129 fig. 9.5:15).

182 Flask

Reg. No. 79/A/70/170; Area A, Sq. J3, Bucket 147

Rim diam.: 4.7; Max h.: 8.5

Concaved inside rim, short cylindrical neck, rounded shoulder, grooved loop handle attached from neck to shoulder. Pink ware (7.5YR7/3), many small white grits, hard fired.

Ridged Neck (No. 183)

Flared rim, narrow high neck, ridged at middle. Globular body flattened on both sides. Two handles attached from below rim to shoulders. The form was classified by Stern as Type 1 (Stern 1981:117). The ridged neck can be considered a continuation of the Iron Age tradition common in Judean sites of the late 6th century BCE.

In Jaffa, a single fragment flask (183) was found. At Gezer, the type was dated to the 5th–4th centuries BCE (Gitin 1990:232, pl. 29:22). However, a similar flask in Dor was dated to the 3rd century BCE (Guz-Zilberstein 1995:310–1, fig. 6.34:4).

Date range: late 5th–3rd cents. BCE

183 Flask

Reg. No. 79/A/56/185; Area A, Sq. I9

Rim diam.: 4; Max h.: 9

Flaring plain rim, long narrow neck, ridged at mid point, rounded shoulder with ribbing, two loop handles attached from neck to shoulder. Pinkish-gray ware (10YR7/2), many minute black grits, medium fired.

9.1.4.2. Hellenistic Flasks

Northern Type (No. 184)

Thickened rim, average neck with distinctive ridge in middle at the point where the handles are attached, globular body with concentric grooves. It is more massive than the southern type.

In Jaffa, one almost complete flask was found, relatively larger than the average type (184). At Dor and Ramat Hanadiv, a few examples were recovered and dated to the 3rd century BCE (Guz-Zilberstein 1995:310–1, fig. 6.34:5; Silberstein 2000:pl. IV:28).

184 Flask

Reg. No. 79/A/72/176; Area A, Sq. J101, Bucket 587

Rim diam.: 4.7; Max h.: 24.5

Collar rim, short cylindrical neck, grooved at mid neck, lightly ribbed spheroid body, two vertical loop handles attached from neck to shoulder. Light reddish-brown ware (5YR6/4), hard fired.

9.1.4.3. Early Roman Flasks

Judean Type (Nos. 185–187)

Plain thickened rim, slim and high neck, globular asymmetrical body, rounded on one side and pointed on the other. Two twisted loop handles attached from middle of neck to shoulders. This type was identified as the Jewish *Kython* (קיתון), which was used as a water container for hand washing, filling the cup and traveling (Bar-Nathan 2002:170). During the late 1st century BCE the typical Judean flask developed its distinctive morphological shape. The fabric and shape remained uniformed and almost unchanged throughout the periods, an indication of being manufactured in a single workshop. The Judean flask continued to be manufactured until the end of the Second Temple period.

The Jaffa examples are fragmentary and seem to belong to the later stage of development (185–187). A complete flask from Jaffa was published as part of the Area C assemblage, dated to the 2nd half of the 1st century CE (Kaplan 1964:11, fig. 3:12). The general tendency is toward elongation of the portion of the neck above the handles, the whole neck is relatively high, and the rim more elaborated. In the 1st century the handles attached at mid-neck and the walls are thinner (Bar-Nathan 2002:66, pl.10:121–2; 169 pl. 26:468–475). The distribution pattern became more restricted and limited to Judea. Most of the examples were found in Judean settlements such as Qumran, Tell el-Ful, Jericho, Herodium, Jerusalem, Machaerus and Masada, and were dated to the 1st century CE (Lapp 1961:161, Type 29g; Lapp 1978:103, pl. 76:8–11; Bar-Nathan 2002:169, pl.26:468–475; Bar-Nathan 1981:60, pl. 4:12–13; Geva 2003:128–9, pls. 5.2 :39; 5.9:15; 5.10:13; Loffreda 1996:60, fig. 21:1–11; Bar-Nathan 2006:116–117, pl. 22:70–73).

185 Flask

Reg. No. C/65/634; Area C, Bucket 764

Rim diam.: 3.5; Max h.: 7

Collar rim, high narrow neck, two handles attached to mid-neck. Pink ware (7.5YR7/3) and light reddish-brown core (5YR 6/4;4/1), hard fired.

186 Flask

Reg. No. C/65/633; Area C, Sq. CC103, Locus 451, Bucket 1037

Rim diam.: 2.2; Max h.: 5.6

Collar rim, high narrow neck, two twisted handles attached to mid-neck. Pink ware (5YR7/4), many minute black grits, medium fired.

187 Flask

Reg. No. 79/G/64/014; Area G, Sq. 36, Locus 502, Bucket 53

Max h.: 5.6

Rim lacking, high neck with two twisted handles attached to below rim. Weak red ware (2.5YR6/2; 5/2), many small white grits, hard fired.

9.1.4.4. Byzantine Flasks

Broad Shoulder (No. 188)

High and narrow neck, broad shoulders slightly carinated at junction with body. The combed decoration on mid-neck and shoulder where the handles are attached to the body is a typical feature of Byzantine pottery. No parallels could be identified.

188 Flask

Reg. No. 79/A/73/103; Area A, Buckets: 564, 593

Rim diam.: 6; Max h.: 15.5

Plain rim, grooved cylindrical neck, carinated shoulder, two vertical loop handles from neck to shoulder. Red ware (2.5YR5/6), internal dark reddish-gray wash (5YR4/1). Many small and big black grits.

9.1.5. Unguentaria

The unguentarium replaced the Greek lekythos as a bottle-shaped container for the storage of oil, perfume, and salves, and for grave offerings. Unguentarium refers to the probable contents of the bottle, namely, unguents. Until the Hellenistic period it was called a bottle or an alabastron. Its first appearance in Spain occurred during the 5th century BCE (Anderson-Stojanovic 1987:105). The unguentaria are known from domestic and burial assemblages across the Near Eastern world. They were very important objects in the funerary assemblage of the Jerusalem ossuary tombs as well as many other tombs in Israel such as those in Ashkelon, Samaria, Beth-Shean, and Akko (Kahane 1952:178). Most scholars believe that those found in tombs were in secondary use, and were designed first of all as containers for the transportation of ointment, balsam, jasmine, kohl, costly oil, and other toilet components (Rahmani 1961:98; Khairy 1980:88). Recent studies concerning the Stobi burial assemblages raised some interesting questions concerning their everyday function.⁴⁷ The research suggested that the coarse fabric of the unguentaria, their non-homogeneous size and shape, and the fact that they are so commonly found in burial contexts, support the conclusion that they could not have been used as perfume vessels but rather as containers for symbolic grave offerings by the family of the deceased.

Its distribution is almost unlimited including the eastern Mediterranean, Aegean Sea, Asia Minor, Egypt, Syria, and Israel (Bar-Nathan 2002:57). It is considered the most common form of Hellenistic plain ware (Berlin 1997:58). Its first appearance in Israel occurred in the end of the Persian period and throughout the Hellenistic period at both pagan and Jewish sites. The various fabrics are an indication of its manufacture at many production centers and workshops. However, most of the unguentaria hardly seem worth transporting as vessels alone, nor are they fine enough to serve as the trademark of any manufacturer. It seems as if the contents of the bottles were first transported in bulk in large vessels, and later on were transferred to the small unguentaria, which were locally produced vessels (Anderson-Stojanovic 1987:115).

The unguentaria were produced in two forms. A. The Hellenistic bottle, a fusiform or spindle-shaped vessel with a high and narrow neck, bulbous body and long foot, resembling the “*Kishor*” shape; B. The Early Roman bottle, piriform shaped with a high and narrow neck, projecting rim, ovoid body and flattened base. The morphological and functional development of the unguentaria was the subject of many studies (Anderson-Stojanovic 1987). Lapp suggested that the heavy ware fusiform bottle was the earlier type dated to the second century BCE while the thin ware vessel was the later type dated to the 1st century BCE that was replaced during the early 1st century CE by the piriform bottle (Lapp 1961:196, Types 91.1–91.2–92). Recent studies concerning the unguentaria from the Hasmonean and Herodian palaces in Jericho created a clear chronological-typological classification of the type. Because unguentaria were found in all Jericho levels it is possible to trace their morphological changes (Bar-Nathan 2002:49). These developments include:

- Fusiform shape with elongated body, dated from 100 to 31 BCE
- Piriform shape
- Small with high neck, dated from 31 BCE to the early 2nd century CE
- With flared neck, dated from 31 to 15 BCE/6 CE
- Large, dated from the 1st to the early 2nd centuries CE

⁴⁷ Anderson–Stojanovic 1987; for its origin function and development, see also Kahane 1952.

9.1.5.1. Persian Bottles

High Base (Nos. 189–192)

Heavy bottle. Thick collar rim, high and narrow neck, bulbous body and high truncated base. The body and neck are decorated with red painted bands and sometimes with vertical leaves.

Stern divided the type into three morphological subtypes that reflect their development toward the Hellenistic elongated “*Kishor*” bottle (Stern 1982:128). The type could have been related as well to the previous “High Base Juglet” on a morphological basis except for the fact that they lack the single handle. Stern attributed their origin to the “West” according to early parallels from tombs in Cyprus. A petrographic analysis at Tel Michal, however, showed that the ware is of local manufacture (Fischer 1989:122) and during the Late Persian period they had wide distribution in Israel. This type was found at many Mediterranean sites from the 4th century BCE and, as recently demonstrated, was relatively common in Israel as well.

In Jaffa, Stern Type 1a was found, dated to the 5th–4th centuries BCE (Stern 82:128). A similar isolated fragment was found at Tel Mevorakh (Stern 1978:39, fig. 9:22) and Tel Qiri (Avisar 1987:19, fig. 5:10–11). At Tel Michal, two examples were recovered from a mid-5th century pit and in a ashes fill of the Hellenistic 3rd century Stratum V (Fischer 1989:122, fig. 9.2:11–12). At Dor and Ramat Hanadiv, they occurred in Early Hellenistic contexts dated to the 4th–3rd centuries BCE (Guz-Zilberstein 1995:304, fig. 6.26:1–6; Silberstein 2000:428–9, pl. IV:13–14). At Tel Anafa, where the type was rather popular during the Early Hellenistic period, eight fragments were recovered, dated to 300–250 BCE (Berlin 1997:62, pl. 12:77–79).

Date range: 5th – early 4th cents. BCE

189 Bottle

Reg. No. 79/B/60/027; Area B, Bucket 28

Base diam.: 3.3; Max h.: 8.2

Horizontal rounded shoulder, body narrowing downward, truncated base. Very pale brown ware (10YR7/4), many small and big black grits, hard fired.

190 Bottle

Reg. No. 79/A/71/156; Area A, Sq. I2, Bucket 277

Base diam.: 3.6; Max h.: 7

Horizontal rounded shoulder, body narrowing downward, truncated base. Pink ware (7.5YR7/3), red painted bands on shoulder and upper body (2.5YR5/6), hard fired.

191 Bottle

Reg. No. 79/A/71/157; Area A, Sq. H2, Bucket 509

Max h.: 7

Horizontal rounded shoulder, body narrowing downward, truncated base. Weak red ware (2.5YR6/4), red painted bands on shoulder and upper body (2.5YR5/6). Many small black grits, hard fired.

192 Bottle

Reg. No. 79/D/63/059; Area D, Bucket 42

Rim diam.: 3.2; Max h.: 6.5

Horizontal rounded shoulder, body narrowing downward, truncated base. Pinkish-gray ware (7.5YR7/2), many small black grits, hard fired.

Peach Body (No. 193)

Thick flanged rim, low neck, peach-shaped body with pointed base. The type belongs to a series of Assyrian bottles that were imported to Israel during the Late Iron Age and imitated during the Persian period in the local ware (Stern 1982:130). In Jaffa, a single complete bottle (193) was found. The distribution pattern points to a concentration of the type in the hinterland and southern part of Israel. Many examples were found at Tell el-Ful (Lapp 1978:92, fig. 61:15), Beth-Zur (Lapp 1970:185, fig. 1:4), and Ramat Rahel (Aharoni 1962:139, fig. 8: lower 3).

Date range: Persian

193 Bottle

Reg. No. 79/A/72/138; Area A, Sq. K4, Bucket 6

Rim diam.: 1.5; Max h.: 6.9

Thick collar rim, short cylindrical neck, peach-shaped body, pointed base. Pink ware (2.5Y8/3), medium fired.

9.1.5.2. Hellenistic Fusiform Bottles

In Jaffa, a great number of fusiform unguentaria were recovered in all excavated areas. The Jaffa repertoire expresses and reflects the morphological development of the fusiform unguentarium toward a more slender, low-capacity body with a tall solid foot. Classifying of the various shapes and fabrics in Jaffa may provide an understanding of their chronological changes during the Hellenistic period.

A. Pseudo Lekythoi (Nos. 194–195)

Projecting flattened rim, heavy medium size neck, and ovoid body. Ring or trucked base. This subtype is the eastern Mediterranean successor to the Greek lekythos. Its first appearance in the Near East occurred during the 4th century BCE, probably prior to the conquest of Alexander the Great (Berlin 1997:58, fig. 24). At Sardis, the ancestor form of the fusiform bottle was recovered in burial contexts dated to the 4th century BCE (Rotroff and Oliver 2003:67, pl. 43:245–247) and these bottles were identified as ash urns or funerary gifts. Those earlier prototypes are missing from sites in Israel. However, a unique fusiform unguentarium was found in Jaffa that can be considered the second stage of development. The bottle, displays a high ring base and wide shoulder and seems to be a closer development of the Attic prototype (194). A single parallel found in a grave at Sardis dated to the 3rd century BCE appears to have the plump amphora-like profile typical of the earlier fusiform bottles (Rotroff and Oliver 2003:67, pl. 43:249–252).

Another type can be considered a later development of the Sardis example (195) with a rather large distribution along the northern Palestinian coast. This type was found at the Hellenistic levels at Dor (Guz-Zilberstein 1995:305–6, fig. 6.26:32–35), Akko, Tel Keisan, Lachish, Samaria, and in the Huleh Valley.⁴⁸ At Tel Anafa, the type is the second most common bottle, of which 17 examples were found in all excavated phases (Berlin 1997:63, pl. 12:80–82). At Sardis, the type was found in a burial context dated to the 3rd century BCE (Rotroff 1997:67, pl. 44:255).

Date range: 3rd cent. BCE

B. Short and Heavy Body (Nos. 196–199)

Rolled rim, low neck, ovoid body of large capacity, low foot. The vessel appeared in the Late Persian period, probably in the late 4th century, and continued to be in use until the 2nd century BCE. Its distribution was not limited to a specific area. In Jaffa, a few examples appear (196–199). Similar appearances occurred along the coast in Dor where they were considered the most widespread of all subtypes (Guz-Zilberstein 1995:304–5, fig. 9–22), Apollonia (Fischer and Tal 1999:240, fig. 5.14:7, 9), and during the same period in the northern region of the country, at Yoqne‘am (Avissar 1996:57, fig. X.7:14–17), Tel Keisan (Briend 1980:111, pl. 14:21), and Tel Anafa (Berlin 1997:63, pl. 12:83–84), and in the Jewish Quarter of Jerusalem (Geva 2003:131, pl. 5.2:44–45).

Date range: late 4th–2nd cents. BCE

⁴⁸ See Berlin 1997:63 for a complete list of references.

C. Elongated and Thin Body (Nos. 200–207)

Thickened rim, high and slender neck, ovoid body of smaller capacity and long solid base with peg toe. The ware is thinner and the capacity varied according to the vessel height. The longer the form is the lower is the capacity (Bar-Nathan 2002:59). The type emerged from the previous short sized type, Type 2, during the 2nd half of 2nd century BCE (Guz-Zilberstein 1995:305, fig. 6.26:23–31). That type was the most common bottle found in almost all Hellenistic contexts of sites in Israel throughout the 1st century BCE. As the distribution pattern displays, the latest examples disappeared during the mid-1st century CE.

In Jaffa, all kinds of body variations appear, but most of the bottles are fragmentary (nos. 200–207). A single, rather huge bottle could have been the earliest development of the type (200). A similar “pared” bottle from Tel Anafa was dated to the Late Hellenistic period (Berlin 1997:65, fig. 13:94–98). The Jaffa examples are without a foot but in those from Tel Anafa the base was solid and low with a peg toe.

The earlier examples were found in the Coastal Plain sites of Dor, ‘Atlit, and Apollonia, dated to late 4th – mid-2nd centuries BCE (Guz-Zilberstein 1995:305, fig. 6.26:23–31; Johns 1933:98, fig. 18; pl. 34:909; Fischer and Tal 1999:240, fig. 5.14:7–9). At Tel Anafa, for example, this was the most popular type of bottle. 105 body fragments were recovered, dated from post-98 BCE to the mid-1st century CE (Berlin 1997:65–6, fig. 14:99–106). The type also appeared at Tel Keisan and Maresha (Briend 1980:111, pl. 14:17b; Levine 2003:113, fig. 6.14:147–149). In Judea, the type was most popular during the 2nd to the early 1st centuries BCE. At Jericho, it was found in all chronological contexts from 100 BCE until 6 CE (Bar-Nathan 2002:57–59, pl. 10:93–102). In the Jewish Quarter of Jerusalem a few examples were found that were classified as Type 2 dated from the 2nd to the 1st centuries BCE (Geva 2003:131–2, pls. 5.2:46–48; 5.4:25). The latest examples were recovered in the Armenian Garden, dated to the mid-1st century CE (Tushingham 1985:54, fig. 22.13–20). The development of that subtype is displayed in the unique pseudo “Stick bottle” (204). Similar examples from Ashdod appear at the 2nd half of the 2nd century to 100 BCE levels (Dothan 1971: 18:5,7–10; 46 fig. 9:5–6; 47, fig. 10:8).

Date range: 2nd cent. BCE to early 1st cent. CE

D. Painted Red (Nos. 208–210)

Long slender narrow silhouetted bottle. Outcurved rim, high neck and foot. The vessel is painted with a dull reddish-brown color on rim and body. Several body fragments were found in Jaffa.

An analysis of the distribution of this type in Dor suggested its dating to the late 3rd and mainly 2nd century BCE (Guz-Zilberstein 1995:306, fig. 6.26:36–40). However, a similar red painted bottle found in Ashdod was dated to the last stage of development of the piriform bottles in 100 BCE (Dothan 1971:57, fig. 18:4, 6). Similar examples appeared as well in the Hellenistic levels at Tel Keisan (Briend 1980:111, pl.14:18) and Yoqne’am (Avissar 1996:57, fig. x.7:11–12). In the Judean region, the type appeared in 1st century BCE contexts at Maresha (Levine 2003:114, fig. 6.14:146), Jerusalem (Mazar 1971:30, fig. 17:21; Geva 2003:132, pls. 5.2:49; 5.7:29; 5.8:26; 5.10:18), and Jericho (Bar-Nathan 2002:57–59, pl. 10:101–102).

Date range: 2nd–1st cents. BCE

E. Gray Ware (Nos. 211–214)

Slender type. Thick projecting rim, high neck, small oval body and truncated string cut foot. The ware is thin, well fired with gray color as a result of firing. The body of one example is characterized by micaceous ware (212) and the other with unusual thin ware (214).

The gray bottles are of an unknown origin but most common at the Athenian Agora during the end of the 4th century BCE. It continued to appear until the mid-2nd century BCE (Thompson 1933:472–4). According to Rotroff, the Athenian group derives from the Cypriot bichrome amphorae (Rotroff 1997:284).

In Jaffa, a single complete bottle was recovered (211). One of the few other fragments had a white painted strip on the shoulder (213). In Israel, the type was found at Dor in the mid-2nd century BCE, probably a local imitation of the imported prototype (Guz-Zilberstein 1995:306, fig. 6.27:1–4). Even though Guz-Zilberstein suggests that the type was rare in Israel, another three base fragments with a slightly micaceous gray fabric of unknown origin were recovered from the Tel Anafa Hellenistic phases (Berlin 1997:66, pl. 15:110). At

Hellenistic Maresha the Athenian gray prototype was found together with the gray ware imitation type (Levine 2003:113, fig. 6.14:144–5). At Jericho, a similar type was found in a 100–31 BCE context (Bar-Nathan 2002:57–59, pl. 10:97).

Date range: 2nd–1st cents. BCE

194 Bottle

Reg. No. 79/A/71/161; Area A, Sq. I2, Bucket 313

Rim diam.: 3.7; Base diam.: 4.3; Max h.: 16

Flattened shelf rim, cylindrical neck, rounded shoulder, narrowing downward body, ring base. Pink ware (7.5YR7/4), hard fired.

195 Bottle

Reg. No. 79/Y/64/117; Area Y, Sq. 4, Locus 606, Bucket 53

Rim diam.: 4; Base diam.: 3; Max h.: 16.5

Flattened shelf rim, relatively short neck, piriform body, small foot flaring toward flattened base. Pink ware (7.5YR7/4), a few minute black grits, hard fired.

196 Bottle

Reg. No. 79/A/71/163; Area A, Bucket 37

Rim diam.: 2.8; Base diam.: 2.6; Max h.: 10.1

Folded rim, cylindrical neck, piriform body, small foot flaring toward flattened base. Light brown ware (7.5YR6/4), hard fired.

197 Bottle

Reg. No. 79/A/71/166; Area A, Sq. I2, Bucket 411

Base diam.: 3.2; Max h.: 10

Small body, high foot flaring toward flattened base. Pink ware (7.5YR7/3), hard fired.

198 Bottle

Reg. No. 79/A/71/162; Area A, Sq. H2, Bucket 521

Base diam.: 2.7; Max h.: 10

Piriform body, small foot flaring toward flattened base. Light brown ware (7.5YR6/4), many small black grits, hard fired.

199 Bottle

Reg. No. 79/T/61/034; Area T, Bucket 10

Base diam.: 3.2; Max h.: 8.4

Rim lacking, high cylindrical neck, piriform body, small foot flaring toward flattened base. Light reddish-brown ware (5YR6/4), many small black grits, hard fired.

200 Bottle

Reg. No. 79/T/62/019; Area T, Grave 21

Rim diam.: 3.4; Max h.: 18

Inverted rim with sharp outer edge, cylindrical high neck, piriform body. pinkish-gray ware (7.5YR7/2) and brown core (7.5YR5/4), many small black grits, hard fired.

201 Bottle

Reg. No. C/65/635; Area C, Bucket 797

Rim diam.: 4; Max h.: 7.6

Flanged rim grooved at outer face, high cylindrical neck. Pink ware (7.5YR7/4) and brown core (7.5YR5/2). Many small and big white grits, medium fired.

202 Bottle

Reg. No. 79/A/70/128; Area A, Sq. J3, Bucket 171

Max h.: 10.6

Cylindrical high neck, small body. Pink ware (7.5YR7/3–4), small many black grits, hard fired.

203 Bottle

Reg. No. 79/A/71/165; Area A, Sq. I2, Bucket 294

Base diam.: 2.9; Max h.: 12.4

High cylindrical neck, small body, high foot flaring toward flattened base. Pink ware (7.5YR7/3), many small black and few medium red grits, hard fired.

204 Bottle

Reg. No. 79/A/70/232; Area A, Sq. K4, Bucket 143a

Base diam.: 2.4; Max h.: 11.5

Small body, high foot flaring at base. Pink ware (10YR7/3), few medium white grits, hard fired.

205 Bottle

Reg. No. A/72/B33.3; Area A, Bucket 33

Rim diam.: 3.2; Max h.: 3.4

Flanged rim, high cylindrical neck. Light brown ware (7.5YR6/4) and yellowish-red core (5YR5/6).

Many small white grits, hard fired.

206 Bottle

Reg. No. 79/C/61/426; Area C, Sq. CC101, Bucket 643

Max h.: 9.8

Body fragment. Reddish-yellow ware (7.5YR6/6), a few minute white and many minute black grits, hard fired.

207 Bottle

Reg. No. 79/C/65/590; Area C, Sq. CC102, Bucket 998

Max h.: 9

Body fragment. Pink ware (7.5YR7/4), few big white and many small black grits, hard fired.

208 Bottle

Reg. No. 79/C/65/559; Area C, Sq. CC102, Locus 449, Bucket 1011

Max h.: 8.3

High cylindrical neck, small body. Pinkish-gray ware (7.5YR7/2) and reddish-yellow core (7.5YR6/8).

Traces of weak red and reddish-black slip (10R4/4–2.5/1). Many big black and a few big red grits, hard fired.

209 Bottle

Reg. No. C/65/645; Area C, Sq. CC103, Bucket 942

Base diam.: 2.5; Max h.: 6.9

High foot flaring toward flattened base. Red ware (2.5YR6/6), a few small and medium white grits, medium fired.

210 Bottle

Reg. No. A/70/B175; Area A, Sq. K3, Bucket 175

Max h.: 10.5

Narrow neck and body with high foot. Red ware (2.5YR6/6; 5/6), many minute white grits, medium fired.

211 Bottle

Reg. No. 79/C/61/427; Area C

Rim diam.: 2.5; Base diam.: 3; Max h.: 11.7

Flaring rim folded at lip, cylindrical neck, fusiform body, small foot flaring toward flattened base, concentric grooves on underside. Ashy remains on external neck. Gray ware (10YR6/1), pale brown core (10YR6/3), hard fired.

212 Bottle

Reg. No. 79/A/70/129; Area A, Sq. K4, Bucket 204

Base diam.: 2; Max h.: 9.7

Cylindrical neck, piriform body, widening downward foot. Dark reddish-gray ware (2.5Y5/1) and reddish-brown core (2.5Y3/1), hard fired.

213 Bottle

Reg. No. 79/Y/68/338; Area Y, Sq. X12, Locus L–2, Bucket 20

Max h.: 8

Rounded shoulder, fusiform body. Weak red ware (2.5Y6/3), white strip on shoulder, hard fired.

214 Bottle

Reg. No. A/70/B200.4; Area A, Sq. K4, Bucket 200

Rim diam.: 3.2; Max h.: 2.2

Flared and folded outward rim, cylindrical neck. Dark gray ware (7.5YR4/1), medium fired.

9.1.5.3. Early Roman Piriform Unguentaria

Flaring rim usually flattened, high narrow neck, bulbous body and flat string cut base. The height of the bottles varies from small (4–5 cm) to large (18 cm). The body capacity is between 25 and 40 ml. The ware is thin and medium fired.

Their origin is still unknown even though the distribution pattern suggests the Jerusalem area as the center of manufacture. At Petra a large assemblage of piriform bottles of local manufacture was found, which probably functioned as containers for transporting balsam from Jericho from the Dead Sea. The Nabateans controlled the perfume market and supplied Europe with precious fluids contained in unguentaria (Khairi 1980:89). In Israel the piriform bottle was popular mainly at grave sites and less common in settlements. It was found in the Jewish cemetery at Jericho (Killebrew 1999:119, fig. III.60:10–11, 16, 23–24), as well as in Jericho palaces (Bar-Nathan 2002:59–60, pl. 10:103–106; 165–167, pl. 26:452–458). However, it was less common in coastal sites. It is missing from the Hellenistic levels of important harbor sites such as Dor, Apollonia and Ashdod, but is most commonly found in Ramat Hanadiv in Hellenistic and Early Roman levels (Silberstein 2000:429, pl. IV:20–24).

The piriform type is most commonly found together with spherical juglets in Early Roman tombs containing mostly collected bone burials. In tombs that contain only ossuary burials ceramic unguentaria were replaced by glass bottles (Killebrew 1999:121). The transition from the fusiform to the piriform type occurred around 50 BCE as displayed in the Stobi, Argos, and Corinth assemblages where both types were found together in graves of the 2nd half of the 1st century BCE (Anderson-Stojanovitz 1987:110).

The type flourished for a short period of time during the 1st century CE and ceased to exist at the end of that century due to the rapid rise in popularity of a similar type of blown glass bottle. Lapp dated similar ceramic bottles from Samaria, Bethany, Bethlehem, 'Ein Feshkha, Ramat Rahel, and Qumran to 20 BCE–68 CE (Lapp 1961:199, Type 92). However, it is difficult to decide whether the blown glass bottle was the piriform prototype, or the contrary, the blown glass bottle emerged from the ceramic vessel as its imitation in glass (Anderson Stojanovic 1987:111).

The morphological development of the piriform bottles is limited since their life span was relatively short. The early type was small (6–10 cm) with a high slim neck (Type e). It developed into the higher bottle (Type f) and terminated with the miniature bottle with a flared neck (Types h, j) (according to Anderson Stojanovitz 1987:pl. 1).

The Jaffa bottles can be divided into three subtypes.

A. Small Type (Nos. 215–218)

Projecting flattened rim, slim low neck, ovoid body with maximum diameter at lower part and flat base. Usually traces of slip or red paint on rim. The shape is similar to the paralleled blown glass bottle and was considered its imitation.

In Jaffa, in contrast to other coastal sites, complete bottles were recovered in tomb contexts (Area T) (215–218). Similar bottles from Stobi were found together with eight fusiform bottles in the same grave dated to 327–139 BCE (Anderson-Stojanovitz 1987:112). This type was very common during the late 1st century BCE and up to the early 1st century CE until it was replaced at mid-century by the blown glass bottle. Those bottles were common in Judea and were found in Herodium (Bar-Nathan 1981:59–60, fig. 4:21–22), Jerusalem (Mazar 1971:30, fig. 17:30), Jericho cemetery (Killebrew 1999:119, fig. III.60:10–11,16), Samaria, Alayiq, and Qumran (Lapp 1961:199, Type 92:A). At Jericho similar bottles were recovered in the Herodian palace, dated from 31 BCE to 6 CE (Bar-Nathan 2002:59–60, pl. 10:103–106). At Masada, the type comprised 45.7% of the bottles at the site during the 1st century CE (Bar-Nathan 2006:203–4, pl. 34:8–9). The small subtype continued to be used in Jericho during the 1st up to the early 2nd century CE with a more flared neck. For some unknown reason, it is absent from the Jaffa repertoire. At the same time the type is found at sites in the northern coast such as Ramat Hanadiv (Silberstein 2000:429, pl. iv:21–23).

Date range: 1st cent. BCE to 1st cent. CE

B. Heavy Type (No. 219)

In Jaffa, a single unique body fragment with thick wall, globular body and flat base was found. The shape resembled the piriform bottle even though the fabric is relatively coarser and thicker. This type was probably considered a household vessel since it was found at Area C. A similar fragment was recovered from Ramat Hanadiv (Silberstein 2000:429, pl. iv:24).

Date range: 1st cent. BCE

C. Large Type (No. 220)

Flattened projecting rim with triangular profile, high slender neck, squat body, flat base. Sometimes burnished.

A single complete bottle was found in Area T (grave no. 21) in Jaffa. The fabric is of well levigated fine ware and seems to be of a non-local manufacture. At Masada, a similar complete bottle was recovered dated to 66/74–80 CE that was identified as a non-local imitation of an Italian prototype (Bar-Nathan 2006:202, pl. 34:2). A similar complete vessel was found in the Jericho palaces in the Herodian 3 context (dated to 6–48 CE), and in the industrial area (Bar-Nathan 2002:66–7, pl. 26:458). The type was in common use during the 1st century CE in settlements and graves in Jerusalem and its environs (Lapp 1961:199, Type 92). It appeared in Herodium (Bar-Nathan 1981:59–60), in tombs on Mount Scopus (Rahmani 1980:53), in the Jason tomb at Rehavia (Rahmani 1967:82), and in the Jericho cemetery (Killebrew 1999:119, fig. III.60:23–24). It was also found in Capernaum in the Galilee (Fernandez 1983:179, 223, T22.1:572–3) and on the southern Coastal Plain in Ramat Hanadiv (Silberstein 2000:429, pl. iv:20). The type was also recovered from mid-2nd century CE contexts in various sites abroad such as Athens, Tarsus, and Dura Europos (Bar-Nathan 2002:166–7).

Date range: 1st cent. CE

215 Bottle

Reg. No. 79/T/62/022; Area T, Grave 21?, Bucket 103

Rim diam.: 3; Base diam.: 1.5; Max h.: 10.2

Flattened rim, high cylindrical neck, piriform body, flat base. Light brown ware (7.5YR6/4), dark red slip on external neck. Many small and a few medium black grits, hard fired.

216 Bottle

Reg. No. 79/T/62/021; Area T, Grave 21?, Bucket 11

Rim diam.: 2.7; Base diam.: 2; Max h.: 11.8

Flattened rim, high cylindrical neck, piriform body, flat base. Red ware (2.5YR5/6), dark red slip (2.5YR4/8), many small white grits, hard fired.

217 Bottle

Reg. No. 79/T/62/025; Area T, Grave 21?, Bucket 11

Rim diam.: 2; Base diam.: 1.4; Max h.: 8.5

Flaring rim, high cylindrical neck, piriform body, flat base. Pink ware (7.5YR8/4), hard fired.

218 Bottle

Reg. No. 79/T/62/023; Area T, Grave 101

Base diam.: 2.7; Max h.: 8

Piriform body, flat base. Reddish-yellow ware (5YR7/6), red core (2.5YR5/6), many small white grits, hard fired.

219 Bottle

Reg. No. 79/C/61/424; Area C, Sq. CC101, Locus 422, Bucket 513

Base diam.: 2.9; Max h.: 6.5

Piriform body, flat base. Reddish-yellow ware (7.5YR6/6) and yellowish-red core (5YR5/8), a few minute white grits, hard fired.

220 Bottle

Reg. No. 79/T/62/020; Area T, Grave 21

Rim diam.: 3.7; Base diam.: 4; Max h.: 18

Flattened rim, high cylindrical neck, piriform body, flat base. Pink ware (5YR7/3), very pale brown wash (10YR7/3), hard fired.

9.1.5.4. Christian Ampulla (No. 221)

In Jaffa, a single ampulla base was found with a small rectangular stamp above it. Hayes assumed that the production center was within Israel based on the wide distribution in Israel and the close similarity to Ware X from Nessana (Hayes 1971:246).

Date range: 600–650 CE

221 Bottle

Reg. No. 79/C/65/035; Area C, Locus 851

Max h.: 6.3

Pointed base with stamped letter X. Weak red ware (2.5YR6/4), reddish-gray core (2.5YR6/1), hard fired.

9.1.6. Ointment Vessels

These are containers for solid unguents that were most popular in many production centers throughout the Hellenistic world. They were probably common votive offerings around the Mediterranean Basin and in the Near East on the basis of their frequent appearance in tombs.

According to Hershkovitz, these variously shaped miniature containers, which held medical ointments, were connected with Hellenistic–Greek settlements. They were imported from the 3rd century BCE until the 1st century CE from Tarsus in Lycia. Her suggestion that these were imitations manufactured in Samaria, Tel Anafa, and Jaffa needs further examination (Hershkovitz 1986:50). However, the relatively frequent appearance of the miniature vessels in all excavated areas in Jaffa supports this idea.

In Jaffa, abundant assemblages of diverse shapes and forms of ointment pots and bottles were found. The fabric is coarse, the walls are thick and sometimes they are covered with dull slip in various light colors.

A. Globular Body (Hershkovitz Type A–B) (Nos. 222–227)

Plain rim, low flared neck, ovoid tiny body with varied shapes from more globular toward squat, high or low disc base. The fabric is light pink to buff and is sometimes covered with brownish red slip.

In Jaffa, a large range of pot sizes and shapes was found. The various sizes may be an indication of various contents or fixed weights. The medium size pot was classified by Hershkovitz as Type B (228–9). Similar pots were found in Dor (Guz-Zilberstein 1995:303, fig. 6.25:10) and Tel Anafa (Berlin 1997:71, pl. 15:PW127–9). The minute pot (225–226) was classified by Hershkovitz as Type A (Hershkovitz 1986:45–6, fig. 1:2–3). A similar example was found at Tell el-Ful from a Hellenistic fill dated to the late 2nd century BCE (Lapp 1978:103, fig. 77:12), in a Late Persian–Hellenistic refuse pit at Ramat Rahel (Aharoni 1964: fig. 14:44) and in the Hellenistic phase at Dor (Guz-Zilberstein 1995:303, fig. 6.25:8).

Date range: late Persian–Hellenistic

B. Squat Body (Hershkovitz Type C) (Nos. 228–230)

The vessels appeared in two variations: less squat (228–229) and more squat (230). This type can be considered the most popular of the ointment vessels. It has also been identified as a stopper. The distribution pattern emphasizes its popularity throughout the eastern Mediterranean, in Syria, Cyprus, Egypt, Anatolia, Sicily, and Greece (for a full reference list, see Berlin 1997:71). In Israel, the type was very popular in Hasmonean sites in Judea as well as in Petra (Horsfield and Conway 1942:143, pl. XXVI:157). The squat pot was identified in the Jericho palaces as a pyxis and appeared in small quantities from the end of 1st century BCE to the beginning of 1st century CE (Bar-Nathan 2002:62–3, pl. 10:112–116). Their appearance in the industrial area suggested a connection with the balsam production at the site (Bar-Nathan 2002:64). Outside Judea the type was found in large quantities. At Tel Anafa, 15 examples of squat and globular pots were found, all

dated to the 1st century BCE (Berlin 1997:70–71, pl. 15:123–129). At Dor, that type was the most dominant group of all the ointment pots (Guz-Zilberstein 1995:303, fig. 6.25:7–14). More examples were found in Ramat Hanadiv in the late 1st century BCE to the 2nd century CE context (Calderon 2000:97, pl. III:60; Silberstein 2000:429, pl. iv:27) and at Nahalat Yehuda, dated to the 1st half of the 1st century CE (Kaplan 1964:15, fig. 4:7).

Date range: late 1st –early 2nd cents. CE

C. Medicine Type (Nos. 231–232)

Narrow neck, globular body and flat base, Two juglets were found in Jaffa. The first with cylindrical body, thick flattened base and remains of handle attached to the shoulder (231). The juglets were covered with red slip. A similar juglet with a semi-elliptical stamp containing two rows of Greek letters and a rose was found in Dor (Guz Zilberstein 1995:302–3, photo 6.20). The juglets were identified according to an assemblage of similarly stamped juglets from Morgentina in Sicily as medicine pots.⁴⁹ The Greek letters were recognized as a reference to “Lykion,” which suggests its contents as medicinal. Lykion was a well known remedy for eye inflammation made of the *rhamnus* plant found throughout the Mediterranean basin (Guz-Zilberstein 1995:303, photo 6.21). The Jaffa examples lacked the above-mentioned stamp but they could be containers for a drug or some kind of medicine. Similar juglets without stamps were recovered in Cyprus (Guz-Zilberstein 1995:303). At Tel Anafa, a similar handleless vessel without a stamp were identified as a perfume bottle and dated to the 1st century BCE (Berlin 1997:72, pl. 15:131–132). At Tel Keisan, the type was found in a Hellenistic context (Briend 1980:111, pl.14:23). The second example from Jaffa is characterized by fine hard fired fabric and seems identical to Nabatean ware (232). A similar bottle was found in Nabatean Petra (Hammond 1972–1973:29, no. 17–18) and in a 3rd century CE context in the Athenian Agora (Robinson 1959:65, pl. 13:k69).

Date range: Hellenistic–Roman

D. Kohl Bottle (Nos. 233–235)

Small cylindrical body with flared rim and flattened, string cut base. In a tomb in Geva, the same type was identified as a toy (Siegelmann 1988:27), but it more probably served as a cosmetic container for blue eye shadow or other cosmetic ointment or powders, although their real function is still unknown. Its frequent occurrence in the southern region may suggest that it had a Jewish ritual function. A few examples were found in Jaffa, two of them in a pit called Sounding X (i.e., Area X). Their distribution pattern in Israel and its vicinity suggests a southern or Nabatean origin. They can be dated exclusively to the 1st half of the 1st century CE according to parallels at various sites in the country. At Jericho, the bottles were found in the industrial area and ritual baths (Bar-Nathan 2002:167, pl. 26:459–461). In Jerusalem, the type was common in the Jewish Quarter (Geva 2003:185, figs. 6.5:36; 6.10:31), the Temple Mount (Mazar 1971:31, III.18:29), the Burnt House (Avigad 1983:122, 128, III.124; Geva 2010:125, pl. 4.4:13–14), and in the Tyropoeon Valley (Crowfoot and Fitzgerald 1929/30, pl. xii:15). This type was found in large quantities (24.6% of the unguentaria) at the Zealot dwellings in Masada, dated to the mid-1st century CE. It was identified as locally made “Judean Unguentaria” in contrast to Hershkovitz’s identification of the type as imported. It was used as the Talmudic *tslohit foliatum* (Zevulun and Olenik 1979:95), a fine expensive perfume container for an exotic plant from the Himalayan Mountains. Three kohl sticks found next to a few bottles in the Zealot dwellings suggested in addition that the bottles functioned as kohl containers. In her view, the small unguentarium was the favored type of talmudic *tslohit* for perfume that replaced the fusiform and piriform unguentaria during the 1st century CE (Bar-Nathan 2006:200,206).

Their appearance along the Coastal Plain, in Jaffa (Kaplan 1964:15, fig. 4:3, 5, 8) as well as in Yoqne‘am (Avisar 1996:59, fig. X.7:26) and in a grave context near Tell Abu-Shusha in Mishmar ha-‘Emeq (Siegelmann 1988:28, 32, III. 28) can be connected to the Jewish settlements. Similar bottles were probably made

⁴⁹ Sjoqvist 1960:78–83. At Mogrentina an assemblage of 54 medicine bottles was found dated from the 3rd to the early 2nd centuries BCE. They were divided into four subtypes.

at many other workshops, as hinted by their appearance in Petra as part of the Nabataean ware (Hammond 1972–1973:30, no. 48; Horsfield and Conway 1942:118, pl. IX:28).

Date range: 1st cent. CE

E. Miniature Bowl Type (No. 236)

Heavy walled bowl with thick plain rim, flattened thick base. Only one complete unique bowl was recovered in Jaffa. The type is unknown. It seems to be a miniature pounding bowl for cosmetic or ritual powders.

F. Miniature Jar Type (Nos. 237–238)

Miniature deep vessel. Plain rim and vertical neck. Ovoid body usually ribbed, flattened string cut disc base. The fabric is coarse and ribbed.

In Jaffa, two complete vessels were found. No parallels were found in Israel. In the Athenian Agora, similar examples were dated to the mid-3rd century CE (Robinson 1959:65, pl. 13:K72). At Petra, the type was rather common as Nabataean coarse ware dated to the Late Roman period (Hammond 1972–1973:28, no. 7; Murray and Ellis 1940, pl. xxvii:29u; Horsfield and Conway 1942:143, pl. XXI:156).

Date range: Late Roman

228 Pot

Reg. No. 79/X/60/022; Sounding X, Bucket 40

Rim diam.: 3; Base diam.: 3.4; Max h.: 6.1

Vertical and slightly thickened rim, short neck, carinated body, high foot. Light brown ware (7.5YR6/4), many small white and black grits, hard fired.

222 Pot

Reg. No. 79/A/73/110; Area A, Bucket 275

Rim diam.: 3.1; Base diam.: 3.2; Max h.: 6.5

Everted rim, piriform body, flat base. Yellowish-red ware (5Y5/6) and dark yellowish-brown core (10YR3/6), hard fired.

223 Pot

Reg. No. 79/A/55/098; Area A

Rim diam.: 2.4; Base diam.: 3.1; Max h.: 4.4

Plain rim, short neck, spheroid body, disc base. Light brown ware (7.5YR6/4), weak red slip (2.5Y6/2). Many small and medium black grits, hard fired.

224 Pot

Reg. No. 79/C/61/423; Area C, Sq. DD100, Bucket 95

Rim diam.: 3; Base diam.: 3.2; Max h.: 4.1

Flared rim, short neck, spheroid body, disc base. Pink ware (5Y7/3), a few minute white grits, soft fired.

225 Pot

Reg. No. 79/A/70/175; Area A, Sq. J3, Bucket 165

Rim diam.: 2.2; Base diam.: 2.2; Max h.: 2.8

Flared rim, short neck, spheroid body, disc base, traces of handle. Pink ware (7.5YR7/3), medium fired.

226 Pot

Reg. No. 79/J/70/098; Area J, Locus 2, Bucket 39

Base diam.: 2.4; Max h.: 2.9

Spheroid body, disc base. Light yellowish-brown ware (10YR6/4), pale brown core (7.5YR6/3), many small white grits, medium fired.

227 Pot

Reg. No. A/71/B317.1; Area A, Sq. J2, Bucket 317

Base diam.: 1.7; Max h.: 2.4

Flared neck rounded tiny body, disc base. Pink ware (7.5YR7/3), light brown core (7.5YR6/4), many minute black grits, medium fired.

229 Pot

Reg. No. 79/G/64/009; Area G, Sq. 25, Bucket 7

Rim diam.: 2.8; Max h.: 5.6

Plain rim, short neck, carinated body, high foot. Pink ware (7.5YR7/4) and dusky red core (2.5YR4/4). Traces of dark red slip on lower face (2.5YR4/6), hard fired.

230 Pot

Reg. No. 79/A/71/155; Area A, Sq. H2, Bucket 509

Rim diam.: 2.5; Base diam.: 2.6; Max h.: 4.9

Plain rim, short flared neck, wide carinated shoulder, short narrow foot. Light brown ware (7.5YR6/3), hard fired.

231 Juglet

Reg. No. 79/A/70/239; Area A, Sq. J4, Bucket 98

Base diam.: 2.3; Max h.: 6.1

Piriform body, traces of handle. Pink ware (7.5YR7/3), brown wash on neck (7.5YR5/4), hard fired.

232 Juglet

Reg. No. 79/A/70/127; Area A, Sq. L4, Bucket 320

Base diam.: 2.6; Max h.: 5.2

Cylindrical neck, rounded body, flat base. Pink ware (7.5YR7/3), a few small black grits, hard fired.

233 Bowl

Reg. No. 79/C/65/B591; Area C, Locus 458 Square: DD103, Bucket1052

Rim diam.: 1.8; Base diam.: 1.4; Max h.: 4.3

Slightly flaring rim, small tube-shaped body, flat base. Light brown ware (7.5YR6/4), medium fired.

234 Bowl

Reg. No. 79/C/61/428; Area C, Locus 432 Square: DD102, Bucket563

Rim diam.: 1.8; Base diam.: 1.1; Max h.: 4.5

Slightly flaring thin rim, long cylindrical neck, small tube-shaped body, flat base. Very pale brown ware (10YR7/3), hard fired.

235 Bowl

Reg. No. 79/X/60/428; Sounding X, Bucket 21

Base diam.: 1.8; Max h.: 5.6

Long cylindrical neck, small tube-shaped body, flat base. Many small white grits. Very pale brown ware (10YR7/3), hard fired.

236 Bowl

Reg. No. 79/A/71/154; Area A, Sq. I2, Bucket 290

Rim diam.: 2.4; Base diam.: 3.3; Max h.: 3.7

Rounded rim, thick walls, flat base. Weak red ware (2.5YR6/4), hard fired.

237 Jar

Reg. No. 79/T/62/015; Area T, Grave 20, Bucket 10

Rim diam.: 5.5; Base diam.: 3.5; Max h.: 8

Plain rim, short neck, wide shoulders, narrowing toward flat base, ribbed body. Remains of one handle attached from neck to shoulders. Very pale brown ware (10YR7/4), hard fired.

238 Jar

Reg. No. 79/A/70/124; Area A, Sq. K3, Bucket 112

Rim diam.: 6.3; Base diam.: 4.2; Max h.: 6.9

Plain rim, rounded ribbed body, flat base. Reddish-yellow ware (5YR6/6), pinkish-white wash (5YR8/2), hard fired.

9.1.7. Local Judean Ware

A few semi-fine fabric vessels in the Jaffa assemblage resemble locally-made thin ware of medium to hard firing quality. The forms are undecorated or slipped and from morphological point of view seem to be local imitations of Italian thin ware. On the other hand, their close similarity to Nabatean ware and particularly

their appearance in large numbers at the Oboda repertoire identify them as plain table ware of southern manufacture (Negev 1986). Their distribution pattern throughout the Judean sites reinforces the suggestion of local southern origin. However, it could be part of the Jewish tradition in ceramic manufacture that developed under inspiration of the local Nabataean style. The production center might have been in Oboda and its vicinity. The presence of the ware in Jaffa and at other coastal sites was the outcome of local trade. In Jaffa, plain bowls and juglets appeared, which served as eating vessels.

9.1.7.1. Incurved Rim Bowls

Small bowls with incurved rim and disc or flattened base, made of thin well fired ware of local manufacture.

The southern bowls differ from the former incurved rim bowls only in their wall thickness and distribution pattern. They can be considered a continuation of the local bowl tradition, known from the 2nd century BCE onward. They appear within sites in Israel and mainly at Judean sites, especially from the late 2nd century BCE to the early 1st century CE, and according to recent evidence, their appearance extends into the 2nd century CE (Bar-Nathan 2006:129).

The Judean bowls were without doubt mass produced. At Masada, the incurved bowls are the most common ones at the site and comprise 41% of all the bowls (Bar-Nathan 2006:129). At Maresha, the incurved bowls were the most common vessels with 191 examples of which 182 were found intact (Levine 2003:83, fig. 6.2:31–33). Some of them were found in situ, standing on a ledge inside a niche and with a *terminus ante quem* date of 112 BCE (Kloner 2003:fig. 3.4). At Jericho, they were found in the early Hasmonean palaces until the Herodian 2 period (100 BCE–6 CE). They account for more than 50% of the pottery vessels recovered and were the most common bowl type in the Hasmonean palace complex. At least 2000 complete bowls were found in various water facilities especially in ritual baths and swimming pools. In the Jewish Quarter of Jerusalem the type was recovered from the *miqweh* dated from the mid-2nd to the 1st centuries BCE (Geva 2003:137–8, fig. 5.3:BL1–2). This phenomenon can reflect their use in Hashmonean purification rituals. Their appearance in a Jewish context in the upper city of Jerusalem and in the Qumran caves brings to mind the idea that they might reflect eating customs among the priestly sect during the Second Temple period such as the Essenes and the Sadducees. On the other hand, some of the bowls in Jericho and Jaffa bear traces of soot on their rims and were used as lamps (Bar-Nathan 2002:86–7, Type J–BL3A3, pl. 14:199–228, color plate V:5).

In Jaffa, the type is relatively numerous but limited to the residential house in Area C. Their common use can be explained in connection with the Jewish inhabitants who settled in Jaffa and brought with them their traditional utensils. All type versions were found in Jaffa.

Type A. Coarse Wall (Nos. 239–241)

Bowl with an incurved rim and rather thick disc base. According to Lapp the early version (Types 51.1 A,B) was more popular at hinterland sites and appeared in Samaria and Shechem during the 2nd century BCE (Lapp 1961:172, Type 51a–b). At Masada, the type was dated from 28/26 BCE to 6 CE (Bar-Nathan 2006:130–132, pl. 25:1–3).

Date range: late 2nd cent. BCE to early 1st cent. CE

Type B. Thin Wall (Nos. 242–246)

Bowl with a thinner and more carinated wall, slightly ribbed at internal face and with string cut base. Considered as of a later date and more connected to Jewish functions and Jewish sites such as Qumran and Bethany, and is dated from 50 BCE to 68 CE (Lapp 1961:172, Type 51C–M). At Masada, they were dated to 66–80/87 CE (Bar-Nathan 2006:130–132, pl. 25:4–16). At Herodium, the type is characterized by the reddish-brown splashed slip on rim (Bar-Nathan 1981:61–2, pl. 6:5–8). More Early Roman examples were found in Judea in Jericho (Killebrew 1999:115–6, fig. III.56:3–5; Bar-Nathan 2002:79–86, pl. 14:199–228). In the Jewish Quarter of Jerusalem, late 2nd century BCE examples appeared (Geva 2003:137–8, pls 5.3:22; 5.4:34–37).

Date range: 1st cent. BCE to 1st cent. CE

Type C. Infolded Rim (nos. 247–249)

Bowl with a thinner and more carinated wall with infolded rim. The infolded rim type found in Jerusalem and Qumran was dated to the mid-1st century BCE (Lapp 1961:178, Type 53J). Sometimes the base is punched at the center and the vessel may have served as a funnel. In Masada, it was dated to 73/74–80/87 CE (Bar-Nathan 2006:133 pl. 25:17–19). Two examples were found in Jaffa. The first is rather coarse and of deteriorated quality (248) while the second is made of finer thin ware that seems to be reminiscent of the Nabataean painted bowl archetype and based on its morphological structure. Painted bowls were very common in the Nabataean traditional ceramic repertoire of the Early Roman period (247).⁵⁰

Date range: 1st cent. BCE to 1st cent. CE

Type D. Saucer/Fish Plate Tradition (no. 250)

Small plate. Infolded rim, flaring almost horizontal wall, ribbed at interior face, flat string cut base. Locally made imitation of Hellenistic Fish Plate without the depression in the floor. They were identified in Tarsus as the saucer type (Jones 1950:212–3, figs. 178–9:25–38) and can be also considered lids. They were developed during the 2nd century BCE, became widespread during Herod's reign, and disappeared toward the end of the 1st century BCE. This type was the most common dish in the Hasmonean palace complex in Jericho (Bar-Nathan 2002:91–93, pl. 16:252–263). However, in Masada, the type comprised only 9% of all the personal tableware. Even though the type was recovered also in a late 1st century CE context, it is from the Herodian period (Bar-Nathan 2006:141–2, pl. 26:52–57). They can be considered another Judean subtype since their distribution pattern and fabric are similar to those of the former bowl type. According to Lapp, the type appeared in the Jerusalem Citadel, Bethany, and Qumran and is dated to 75–4 BCE (Lapp 1961:178, type 53: H). In the Jewish Quarter of Jerusalem, the type is dated to the 1st century BCE (Geva 2003:138, pls. 5.4:42; 5.8:42; 5.9:29; 5.10:35–36).

A few examples appear along the southern shore in Ashdod (Dothan 1971:47, fig. 10:1) dated to pre-100 BCE and two appear in Shiqmona (Elgavish 1974:69, fig. 3:6; 1974:35, pl. XXI:244–245). The few examples from Tell el-Ful are dated to the late 2nd century BCE and considered “plain kitchen ware” (Lapp 1978:104, fig. 77:20). The pieces from Maresha are dated to pre-112 BCE and can be considered the earlier examples (Levine 2003:83, fig. 6.2:28–30).

Date range: 1st cent. BCE to 1st cent. CE

239 Bowl

Reg. No. 79/C/61/411; Area C, Sq. DD100, Bucket 468

Rim diam.: 11; Base diam.: 3.5; Max h.: 4.6

Incurved rim, rounded walls, flat string cut base. Very pale brown ware (10YR7/3) and pale brown core (10YR6/3). Traces of ash on the rim. Many minute white grits, medium fired.

240 Bowl

Reg. No. 79/C/61/413; Area C, Sq. CC101, Bucket 647

Rim diam.: 10.7; Base diam.: 3.5; Max h.: 4

Incurved rim, rounded walls, flat string cut base. Very pale brown ware (10YR7/3), traces of ash on the rim. Many small black grits, hard fired.

241 Bowl

Reg. No. 79/C/65/585; Area C, Bucket 763

Rim diam.: 10; Base diam.: 3.5; Max h.: 4.5

Incurved rim, rounded walls, flat string cut base. Pale red ware (2.5YR7/3), reddish-yellow core (7.5YR7/6), many small white and a few small black grits, hard fired.

242 Bowl

Reg. No. 79/A/56/260; Area A, Sq. I9

Rim diam.: 14.2; Base diam.: 4; Max h.: 5.5

Sharply incurved rim, rounded walls, flat string cut base. Red ware (2.5YR5/6), hard fired.

⁵⁰ Hammond 1962:170–180.

243 Bowl

Reg. No. 79/C/61/415; Area C, Bucket 653

Rim diam.: 12; Base diam.: 4; Max h.: 4.2

Sharply incurved rim, rounded walls, flat string cut base. Very pale brown ware (10YR7/3), many small white grits, hard fired.

244 Bowl

Reg. No. 79/C/65/586; Area C, Bucket 818

Rim diam.: 10; Base diam.: 3.8; Max h.: 2.8

Sharply incurved rim, rounded walls, concaved base. Reddish-yellow ware (7.5YR7/6), strong brown core (2.5YR5/6), many small black grits, medium fired.

245 Bowl

Reg. No. 79/C/61/412; Area C

Rim diam.: 9; Base diam.: 3.5; Max h.: 3.2

Sharply incurved rim, rounded walls, flat string cut base. Pale red ware (2.5YR7/3), hard fired.

246 Bowl

Reg. No. 79/A/72/136; Area A, Bucket 86

Rim diam.: 10.9; Base diam.: 4.8; Max h.: 5

Sharply incurved rim, rounded walls, concaved string cut base. Very pale brown ware (10YR7/3), red painted band around rim. Many small gray grits, hard fired.

247 Bowl

Reg. No. C/61/591; Area C, Bucket 382

Rim diam.: 14.4; Max h.: 2

Infolded rim, rounded walls. Reddish-brown ware (5YR5/40) and yellowish-red core (2.5YR5/6). Many small white grits, soft fired.

248 Bowl

Reg. No. C/65/B1037.2; Area C, Sq. CC103, Locus 451

Rim diam.: 11.7; Max h.: 2

Infolded rim, thin sloping wall. Light reddish-brown ware (5YR6/4) and gray core, medium fired.

249 Bowl

Reg. No. C/61/B637.2; Area C, Sq. CC100, Locus 433, Bucket 637

Rim diam.: 13; Max h.: 2.5

Infolded rim, thin sloping wall. Light reddish-brown ware (5YR6/4) and gray core (5YR5/1), a few large red grits, medium fired.

250 Saucer

Reg. No. 79/C/61/416; Area C, Sq. CC101, Bucket 646

Rim diam.: 12; Base diam.: 3.7; Max h.: 3.3

Outcurved rim, flaring walls, flat base. Pink ware (7.5YR7/4) and pinkish-gray core (7.5YT6/2). Many small white and black grits, hard fired.

9.1.7.2. Cups (Nos. 251–252)

Plain rim, rounded wall and flat base. The pottery cups are rather rare and probably more popular in glass (Bar-Nathan 2006:143). The type was identified by Lapp in Qumran and dated to 50–68 CE (Lapp 1961:175, Type 52.1). At Masada, a few examples were dated to 66–73/74 (80) CE (Bar-Nathan 2006:143–4, pl. 26:59–63).

Date range: mid-1st cent. CE

251 Cup

Reg. No. 79/C/65/558; Area C, Sq. DD103, Locus 439, Bucket 897

Rim diam.: 8.2; Base diam.: 3; Max h.: 6

Pointed rim, spherical body, rounded grooved base. Reddish-gray ware (5YR5/2) and reddish-brown core (5YR4/3). Many small white grits, hard fired.

252 Cup

Reg. No. C/61/B621; Area C, Sq. DD102, Locus 432, Bucket 621

Max h.: 5.5

Plain rim, rounded wall. Red ware (2.5YR6/6) and reddish-brown core (2.5YR3/1).

A few minute white grits, medium fired.

9.1.7.3. Spherical Juglets

Cup-like mouth, slim neck and globular body. The base varies from rounded to flattened or ring base. One handle attached from rim to shoulder. The ware is thin and stiff with metallic ring. This was considered the typical Second Temple perfume juglet in Israel. The antecedents of the form are the local Iron Age and Persian globular juglets that became traditional and typical to the Jewish settlements in Judea from the 2nd century BCE onward.

Kahane believed that there were Greek influences upon the local Herodian ware and identified the spherical juglet as the local counterpart of the Greek squat lekythos and the aryballos (Kahane 1953:48). According to him, the gap between the 5th–4th centuries lekythoi and the 2nd century juglets can be explained by the fact that “identical use often creates similar or even identical forms” (Kahane 1953:50).

Spherical juglets functioned as unguent containers and appeared alongside piriform bottles in graves of the Early Roman period, and thus can be dated mainly to that time. Like the unguentarium, its coarse undecorated fabric raised questions by Anderson-Stojanovic concerning their function in daily life. Unlike the foreign unguentaria, the spherical juglets are well documented in the Jewish sources.⁵¹ Its shape accords well with the Talmudic description of the “*tslohit*” (צלוּחִית). According to the description, its collar is constricted inward, its shoulder is high and with a narrow mouth to preserve the costly perfume inside from evaporation and/or spillage (Bar-Nathan 2002:50).⁵² However, another probable use for the spherical juglet is as funnel to measure out wine for purchasers (Avodah Zarah 5:7) or as a burial offering to give off its fragrance (Genesis Rabbah 30:10). Keeping in mind the locally made fabric of the spherical juglet, it is reasonable to accept the above-suggested functions.

Lapp’s chronological division described the earlier type as having a rounded base, and of a larger size in the 2nd century and smaller in the 1st century BCE. Toward the 1st century CE the body became elongated and the base flattened (Lapp 1961:162–3, Type 31.1–31.2). Bar-Nathan divided them in Masada according to base shapes and dated them from 28/29 BCE to 80/87 CE. Both thin and coarse fabric were included by her within the same category instead of being an indication of different workshops that were all probably located in Judea (Bar-Nathan 2006:191–194, Type 1, Pl. 33:1–14).

In Jaffa, the spherical juglets can be divided into two subtypes.

A. Coarse Ware (Nos. 253–257)

One example from Jaffa is decorated on the neck with burnished lines (254). Most of the Jaffa examples are of medium size (12–13 cm) and probably date from the 2nd century BCE to the 1st century CE.

The type already appeared during the Hellenistic period in Maresha, Tel Michal, and Ramat Hanadiv (Levine 2003:108, fig. 6.13:126–8; Fischer 1989:181, fig. 13.2:17; Silberstein 2000:428, pl. IV:6). They were common in all contexts from the 1st century BCE to the mid-1st century CE throughout Judean sites (Lapp 1961:162–3, Type 31.1). They also appeared in the Jericho palaces and cemetery (Bar-Nathan 2002:52–55, pl. 10:85–88; 162–163, pl. 25:443–450 – with full references for Judeans Tombs; Killebrew 1999:119–120, fig. III.60:1–2) and in Masada (Bar-Nathan 2006:191–194, pl. 33:1–14). Similar juglets from Jaffa and Nahalat Yehuda were dated to 50–67 CE (Kaplan 1964:11, Ill. 3:6).

Date range: 2nd cent. BCE to mid-1st cent. CE

⁵¹ Bar-Nathan 2002 suggested Talmudic interpretations for the function of the juglets in the Jewish world.

⁵² Bar-Nathan already identified the *tslohit* with the fusiform and piriform unguentarium but the Talmudic sources mentioned several other kinds of *tslohit* for different uses.

B. Thin Ware (Nos. 258–264)

Globular body, made of high quality ware with finer adapted cup-like mouth and thin strip handle. In Jaffa, all of them were found in Area C. No. 263 was dated to 4–50 CE (Kaplan 1964:11, fig. 3:3, 6). Their fabric is fine, hard fired, with a dark core. The finer metallic fabric with a dark gray core suggested imitation of the “thin walled Italian ware,” probably from a Nabatean workshop. At Oboda, similar fine household ware was attributed to Nabataean workshops since such fabrics were found in Petra (Negev 1986:100:841–842; Horsfield 1942, pl. XXVIII:223; Murray & Ellis 1940, pls XI:B, XXXIII:34, form 68).

One example with a more elongated body (263) can be identified as a later development of the 1st century CE (Lapp 1961:163, Type 31.2:a). In the Jericho cemetery, similar fine thin walled juglets were found within coffin burials as well as in collected bone burials (Killebrew 1999:120–1, fig. III.60:6–9). The tendency toward a finer wall was identified as a chronological development from the 1st century BCE toward the 1st century CE (Bar-Nathan 2002:55) even though examples of the 2nd century were already discovered in Samaria and in Beth-Zur (Lapp 1961:162, Type 31.1c). At Ashdod, the type appeared from the late 2nd century BCE till the early 1st century CE (Dothan 1967:25, figs. 6:9; 11:13; Dothan 1971:57–58, fig. 17:11–12). At Masada, the type is dated to 28 BCE–88 CE (Bar-Nathan 2006:191–194, pl. 33:11).

The two subtypes described above were the most common form in Judea, in Jerusalem and its vicinity, especially in contexts dating from the Great Revolt (66–73 CE). The chronological development according to the above examples was along two parallel lines. The type first appeared in the 2nd century BCE, but continued to be manufactured in coarse and in fine fabric in the same period. We cannot distinguish between them functionally, since both served at ritual ceremonies and as perfume bottles throughout the Early Roman period.

Date range: late 2nd cent. BCE 1st cent. CE

253 Juglet

Reg. No. A/70/B200.3; Area A, Sq. K4, Bucket 200

Rim diam.: 2.5; Max h.: 6

Cup-like mouth, narrow cylindrical neck, globular body, handle attached to rim. Light brown ware (7.5YR6/4) and light gray core (7.5YR7/1), pinkish-white wash (7.5YR8/2). Many small white grits, medium fired.

254 Juglet

Reg. No. 79/G/64/012; Area G, Sq. 27, Bucket 33

Rim diam.: 1.2; Max h.: 5.5

Cup-like mouth, narrow cylindrical neck, globular body, handle attached to rim. Light brown ware (7.5YR6/4) and red core (2.5YR5/8), brown painted bands on external neck and body (7.5YR4/3), hard fired.

255 Juglet

Reg. No. 79/Y/68/324; Area Y, Bucket 35

Rim diam.: 2.5; Max h.: 4

Cup-like rim with flattened lip, short narrow neck, handle extending to rim. Pale red ware (2.5Y7/3) and weak red core (2.5Y6/3). Many small black grits, medium fired.

256 Juglet

Reg. No. C/65/B983.2; Area C, Sq. CC102, Bucket 983

Rim diam.: 3.6; Max h.: 2.6

Cup-like rim, one handle attached from rim. Pale red ware (2.5Y7/3) and weak red core (2.5Y6/3). Many small black grits, medium fired.

257 Juglet

Reg. No. 79/C/61/425; Area C, Sq. CC101, Bucket 636

Base diam.: 3; Max h.: 7.2

Spheroid body, slightly ribbed, flat base, traces of handle on shoulder. Reddish-yellow ware (7.5YR7/6), many small black grits, hard fired.

258 Juglet

Reg. No. 79/C/65/587; Area C, Sq. CC103, Locus 451, Bucket 1033

Rim diam.: 1.6; Max h.: 11.4

Cup-like rim, narrow cylindrical neck, spheroid body, rounded base, wide strap handle from rim to shoulder. Red ware (2.5YR5/6), medium fired.

259 Juglet

Reg. No. 79/C/65/588; Area C, Sq. CC103, Locus 451, Bucket 1035

Rim diam.: 1.7; Max h.: 12.4

Cup-like rim, narrow cylindrical neck, spheroid body, rounded base, wide strap handle from rim to shoulder. Red ware (2.5YR5/8) and dark reddish-gray core (2.5YR4/1), hard fired.

260 Juglet

Reg. No. C/65/637; Area C, Bucket 931

Rim diam.: 2; Max h.: 3.7

Cup-like rim, narrow cylindrical neck, wide strap handle from rim to shoulder. Red ware (10R5/8), a few small white grits, medium fired.

261 Juglet

Reg. No. C/61/592; Area C, Sq. DD102, Locus 424, Bucket 497

Max h.: 5.5

Narrow cylindrical neck, spheroid body. Light reddish-brown ware (5YR6/4) and strong brown core (7.5YR5/8), a few small white grits, soft fired.

262 Juglet

Reg. No. 79/C/69/599; Area C

Rim diam.: 1.7; Base diam.: 2.6; Max h.: 8

Cup-like rim, short neck, spheroid body, flat base, strap handle attached from rim to body. Red ware (25YR6/6), medium fired.

263 Juglet

Reg. No. C/61/599; Area C, Sq. DD102, Locus 432, Bucket 621

Rim diam.: 3.5 Max h.: 5.6

Cup-like rim, narrow short neck, strap handle attached from rim to body. Light reddish-brown ware (5YR6/4) and dark gray core (5YR4/1). Many minute white grits, hard fired.

264 Jug

Reg. No. C/61/B658; Area C, Sq. DD101, Bucket 658

Rim diam.: 4.4; Max h.: 4

Collar rim, narrow neck. Dusky red ware (2.5YR4/4), medium fired.

9.1.7.4. Small Pots/Mugs (Nos. 265–268)

Plain rim, high neck and globular body. Two handles attached from rim to shoulder.

The Jaffa example has very thin wall of semi-fine fabric, untypical of the customary coarse cooking ware (265–266). The two examples are not identical: one with hard fired ware (265) and the second with medium fired ware (266), which is an indication of several workshops. A vessel of similar shape and fabric was classified at Oboda as a “problematic” small pot (Negev 1986:83–84, nos. 680–695). This type probably did not function as a cooking vessel but rather as an accessory one. At Masada, a rather small quantity of similar one-handed pots were found that were identified as mugs (Bar-Nathan 2006:145–6, pl. 26:72–74). The Masada examples are of thin, well levigated ware like the Jaffa vessels, and are dated to 66–73/4 CE. Both can be considered influenced by the Italian thin walled ware. Similar pots appeared as well in Machaerus dated to 70 CE (Loffreda 1996:58–59, fig. 20:11).

Date range: 1st cent. CE

265 Pot

Reg. No. 79/C/65/592; Area C, Sq. DD103, Locus 456, Bucket 1054

Rim diam.: 9; Max h.: 4

Plain rim, wide neck, two loop handles from rim. Weak red ware (2.5YR5/4), hard fired.

266 Pot

Reg. No. C/61/594; Area C, Sq. DD101, Locus 428, Bucket 549

Rim diam.: 8; Max h.: 4.6

Plain rim, wide slightly diagonal neck, two strap handles from rim to shoulder. Light brown ware (7.5YR6/4) and reddish-yellow core (7.5YR6/6). A few minute white and black grits, soft fired.

267 Pot

Reg. No./61/B349.2 Feld: C Square: DD102, Bucket 349

Rim diam.: 0.5; Max h.: 6.5

Pointed lip, broad neck, two loop handles attached from rim to shoulder. Light reddish-brown ware (5YR6/4) and reddish-yellow core (5YR6/6). A few minute small grits, medium fired.

268 Pot

Reg. No. C/61/B286.3; Area C, Sq. DD102, Bucket 286

Rim diam.: 9.5; Max h.: 8

Flanged rim, broad concaved neck. reddish-yellow ware (5YR6/6), medium fired.

9.1.7.5. Cup with Barrel-Shaped Body/Beaker (No. 269)

The Nabatean thin walled cup was not very common and comprises a small percentage of the total ceramic corpus of Hasmonean and Herodian contexts at Judean sites. The cup served mainly for drinking according to Jewish traditional customs of the Second Temple period until 70 CE, when it was replaced by glass cups. The typical Hasmonean cup was shaped with a flared wall. During the Early Roman period, under the influence of the Italian thin walled vessel, a new form appeared with a barrel-shaped body in imitation of the Italian thin walled beaker.⁵³ That late type occurred particularly in Judea and in the Dead Sea region.

In Jaffa, a single small undecorated cup (goblet) was found (269) with an everted rim and thin rounded wall. According to parallel examples, it probably had a flattened base. The ware is thin and of fine quality, but not as fine as the Nabatean “Egg Shell” ware so typical of Petra (Horsfield 1942, fig. 19:no. 217; Murray and Ellis 1940:18–19). The fabric can be considered medium fine ware typical of the Oboda “accessory vessels.” A similar type in Oboda was classified as a “Honey Jar” dated from 20 BCE to 50 CE (Negev 1986:83, 665–679). At Jericho, the type usually appeared with a brown-red slip or painted decorations and was dated to the 1st half of the 1st century CE (Bar-Nathan 2002:186, Type J–CUP3, pl. 28:540–542). At Petra, the type continued to be used throughout the 2nd century CE (Horsfield 1942:137, pl. xviii:129).

Date range: 1st cent. CE

269 Beaker

Reg. No. A/70/B115; Area A, Sq. K3, Bucket115

Rim diam.:11; Max h.: 8

Flanged rim, rounded wall. Light reddish-brown ware (5YR6/4), many minute white and black grits, medium fired.

9.1.7.6. Deep Bowls (Nos. 270–271)

Broad shelf rim, carinated shoulder, two strip handles attached from rim to shoulder, rounded to flattened base. Similar bowl was found at Nahalat Yeuda and dated to 1st half of the 1st century CE (Kaplan 1964:13, fig. 3:11, pl. 3:7). The shape is typical of cooking vessels although the fabric is semi-fine with thin medium fired wall. Lapp defined the form as the deep bowl type. At Petra, a similar bowl made of Nabataean ware was recovered (Murray and Ellis 1940:17–18, pl. XXXI:124).

⁵³ Stojanovic and Stojanovic 1992, pl. 20–1 (Stobi).

In Jaffa, a fragment was found that can be dated according to parallels from Qumran to the mid-1st century CE (Lapp 1961:174, Type 51.6a).

Date range: 1st cent. CE

270 Bowl

Reg. No. C/61/B253.2; Area C, Sq. DD102, Bucket 253

Rim diam.: 17; Max h.: 3

Everted rim, rounded wall. Light reddish-brown ware (5YR6/4), reddish-brown core (5YR5/4), medium fired.

271 Bowl

Reg. No. C/61/593; Area C, Sq. DD102, Locus 432

Rim diam.: 19.5; Max h.: 3.1

Flanged rim, concaved wall creating carination at middle. Two strap handles attached from rim to shoulder. Weak red ware (2.5YR5/4) and reddish-brown core (2.5YR3/1). A few small and minute white grits, medium fired.

9.1.8. Kraters

Deep open vessel for mixing and/or serving food or drink. The Greek prototype was made of fine glazed and decorated ware. During the Hellenistic period the Classical column krater was imitated in Corinth by undecorated plain ware krater called “Corinthian type Column Krater” and later on was manufactured at eastern Mediterranean sites. The distribution of this locally made krater was limited to Hellenized sites and it was totally absent from the Hasmonean Kingdom.

9.1.8.1. Persian Kraters

Open Wall Type (No. 272)

Open mouth with thickened heavy rim, coarse and heavy wall. Sometimes appears with an impressed and burnished chevron pattern.

In Jaffa, a single rim fragment was found. The fabric is very coarse but it lacks the typical impressed decoration that was so common at the early 6th century BCE version from Jerusalem (Tushingham 1985:35, fig. 15:18). During the Persian period the type appeared sporadically. At Apollonia, it was defined as belonging to the Greek style dated from the mid-5th to the mid-4th century (Tal 1999:124, fig. 4.22:1–2). At En-Gedi, a single fragment was recovered in the Persian context (Stern 2007:201, fig. 5.2.3:1–2).

Date range: early Persian

272 Krater

Reg. No. A/70/B184.2; Area A, Sq. J3, Bucket 184

Rim diam.: 38.5; Max h.: 3.5

Knobbed rim, vertical heavy wall. Pink ware (5YR7/4) and gray core (5YR6/1). Many medium gray grits, hard fired.

Small Type (No. 273)

Everted rim, rounded wall, two horizontal handles attached below rim. The fabric is light in color and heavy. A single example was found in Jaffa. A similar complete Krater slipped on its exterior and interior face was recovered from the Ma‘agan Mikha’el shipwreck dated to 400 BCE (Artzi and Lyon 2003:186, fig. 3:1). The type seems to be of Cypriot origin and can be paralleled with examples from the sanctuary at Limasol (Karageorghis 1977, fig. 17:2). Another 5th–4th centuries BCE Krater from the Armenian Garden in Jerusalem is not completely identical (Tushingham 1985:34, fig. 14:17). However, the appearance of a krater at a relatively early period as a local imitation of the Greek and Cypriot prototype is surprising.

Date range: late Persian

273 Krater

Reg. No. 79/A/56/188; Area A, Sq. H7 (x)

Rim diam.: 31.2; Max h.: 5.2

Flared rim with interior ledge, heavy thick and rounded wall, horizontal loop handle. Pink ware (5YR7/4). Many big white and black grits, hard fired.

9.1.8.2. Hellenistic and Early Roman Kraters

The local Hellenistic krater entered the ceramic repertoire in Israel probably during the 2nd century BCE as an imitation of the Greek type. The typical krater was of fine unslipped ware, deep body, pronounced neck and usually with a ring base. In the earlier version the close imitation of the Greek prototype still can be seen, according to the vegetable painted decoration that paralleled the West Slope Technique ware.

Deep Kraters with Pseudo West Slope Decoration (Nos. 274–275)

An open deep basin with flattened shelf rim, steep thin wall, usually provided with two horizontal handles. The antecedent Attic prototype was called Lekane and was part of the household ware most common in Attica during the 6th–4th centuries BCE (for more details see the chapter on East Greek Pottery). The Hellenistic imitations vary in fabric and shape and can be identified as kraters in general. Those imitations are very common in Cyprus and appeared in Agios Georgios, Nicosia (Berlin and Pilacinski 2003:223, fig. 7:119–120).

In Jaffa, two locally made kraters were found with white painted decoration. The first was unslipped with a wreath-leaved pattern (274) and the second with white and red painted decoration over a red slip background (275). Both of them can be considered a Hellenistic development of the traditional Attic Lekane or a local imitation of the West Slope Technique ware. The same wreath-leaved painted decoration appears on a Tel Anafa krater dated to 250–125 BCE (Berlin 1997:136, pl. 43:403). Parallel Lekane from the Athenian Agora with a similar flat shelf rim was dated to the 3rd quarter of the 4th century BCE or later; none of them were decorated as the Jaffa examples (Sparkes and Talcott 1970:215, pl. 87:1835–1838). At Dor, similar shaped kraters with or without slip were found in small quantities but in various Hellenistic phases from the end of the 4th to the late 2nd century BCE (Guz-Zilberstein 1995:296, fig. 6.12:4). A single example from Samaria displays a similar white painted decoration and was dated to the Hellenistic period (Crowfoot et al 1957:267, fig. 57:8). At Maresha, similar kraters were described as Lekane and were dated to the 3rd–2nd century BCE (Levine 2003:88–9, fig. 6.4:57–58). At Tel Keisan, a similar profile-shaped krater was found dated to 450–380 BCE (Nodet 1980:122, pl. 20:22).

Date range: 3rd–2nd cents. BCE

274 Krater

Reg. No. 79/Y/64/141; Area:Y, Sq. 1, Locus 601, Bucket 3

Rim diam.: 25; Max h.: 12

Shelf rim slightly concaved. Rounded wall, creating deep bowl. horizontal loop handle below the rim. Red ware (10R4/6). On the external wall there was a panel of a wreath-leaved pattern painted in white. Below the rim was a dusky red painted band (10R3/4).

A few big white grits and many small black grits, medium fired.

275 Krater

Reg. No. A/71/B375; Area A, Sq. J2, Bucket 375

Rim diam.: 25; Max h.: 5

Shelf rim, vertical wall. Reddish-yellow ware (5YR6/6), dark red slip (2.5YR4/8). On the external face there was a spiral pattern in brown color. On the rim there were dusky red painted (2.5YR3/3) and white alternating bands. Many minute white and black grits, hard fired.

Local Deep Hellenistic Kraters

The local kraters are characterized by a deep body and projecting rim that can be flattened or have a more elaborated arched with overhanging lip. Usually two horizontal loop handles, pinched upward to the rim.

In Jaffa, several subtypes were found that are typical of various regions.

A. Arched Rim (Northern Type) (Nos. 276–277)

Projecting or overhanging rim, sometime creating carination at junction with body and forming a pseudo neck that resembled that of the traditional Attic column krater. According to the parallels, the type was widely spread at Hellenistic and Early Roman levels throughout Israel. Unlike the former, this type did not penetrate the Judean region in large numbers, and was common in Galilee and in the Shephelah (the Judean foothills). The Hellenistic version, dated particularly to the 2nd century, displays handles and a more overhanging rim while the later Early Roman type is usually without handles.

In Jaffa, only rim fragments were found (276–277). Both probably belong to the overhanging subtype. Similar complete kraters from Dor and Shiqmona were dated to the 2nd century BCE (Guz-Zilberstein 1995:296, fig. 6.11:5–9; Elgavish 1976, fig. 2:2). At Apollonia, a single rim fragment was recovered from a refuse pit dated from the late 4th to the late 2nd century BCE (Fischer and Tal 1999:237, fig. 5.11:16). At Tel Anafa as well as other northern sites, this was the most common krater dated from 98 BCE to the early 1st century CE (Berlin 1997:135–6, pl. 42:PW393). At Tel Keisan, the type was dated to the 2nd century BCE (Briend 1980:108, pl. 12:9). The same type was manufactured in Agios Giorgios, Nicosia during the 3rd–2nd century BCE (Berlin and Pilacinski 2003:223–4, fig. 8:124–5).

Date range: 2nd–1st cents. BCE

B. Medium Size (Nos. 278–279)

Flaring rim, concaved below and forming pseudo neck, carinated body and ring base, handleless. Like the former type, it can be considered a late development of the traditional Attic column krater. Local pseudo column kraters were recovered in Maresha (Levine 2003:91–2, fig. 6.4:63–64), Ashdod (Dothan 1971, fig. 61:8,11) and Dor (Guz-Zilberstein 1995:296, fig. 6.11:4). All of them were dated to the 3rd–2nd centuries BCE. In Jaffa, one complete krater was found (278) and another rim fragment (279). Both are also local Hellenistic imitations of the Attic krater.

Date range: 3rd–2nd cents. BCE

C. Small Size (Nos. 280–281)

Flaring rim with emphasized carination below, globular body and wide concaved bottom with low ring base. They appear in two versions: the first with a deep body (280) and the second with a shallow body (281). Both were found in Hellenistic tombs in Area T. The deep body krater was probably in common use in funerary contexts. However, no similar examples were found. At Maresha, a pithoid jar that was considered a local imitation of the Mycenaean and the Phoenician types appears with red slip and four handles. The Maresha example is considered a unique locally made vessel dated to the Hellenistic period, not later than the late 2nd century BCE (Levine 2003:90, fig. 6.4:61). At Dor, Hellenistic small kraters with wide necks were found (Guz-Zilberstein 1995:297, fig. 6.15:1–4). However, the Jaffa krater was made of crispy and fragile typical ware and can be defined as a Hellenistic funerary vessel.

Date range: 3rd–2nd cents. BCE

276 Krater

Reg. No. C/61/607; Area C, Bucket 639

Rim diam.: 2.4; Max h.: 38

Arched rim overhanging down at lip and slightly hooked. Reddish-gray ware (5YR5/2) and dark gray core (5YR4/1), many small white grits, medium fired.

277 Krater

Reg. No. C/65/B920.1; Area C, Sq. CC102, Bucket 920

Rim diam.: 38; Max h.: 4

Arched rim overhanging at lip. Reddish-gray ware (5YR5/2) and dark gray core (5YR4/1), many small white grits, medium fired.

278 Krater

Reg. No. 79/A/73/102; Area A, Locus 1000, Bucket 358

Rim diam.: 27; Base diam.: 9; Max h.: 13.5

Everted rim, wide neck, carinated shoulder, ring base. Pink ware (7.5YR7/4), many minute black grits, medium fired.

279 Krater

Reg. No. 79/J/70/059; Area J, Locus 5, Bucket 52

Rim diam.: 26; Max h.: 6

Infolded vertical rim, wide neck slightly carinated at shoulder. Pale red ware (2.5Y7/3) and strong brown core (7.5YR5/6). Many small white grits, medium fired.

280 Krater

Reg. No. 79/T/61/043; Area T

Rim diam.: 13; Base diam.: 5.5; Max h.: 11

Everted rim, short neck, rounded shoulders, body narrowing toward base, slightly ribbed, ring base with concaved underside. Reddish-yellow ware (5YR7/6), many minute white grits, medium fired.

281 Krater

Reg. No. 79/T/61/006; Area T, Grave 5

Rim diam.: 15; Base diam.: 5; Max h.: 8

Outcurved rim, wide neck, sloping wall, narrowing toward the ring base. White ware (10YR8/1) and very pale brown wash (10YR7/3), medium fired.

Kraters with Appliqué of Satyr Head (Nos. 282–283)

Deep rounded wall krater decorated under rim with a satyr head.

In Jaffa, two satyr heads were found attached to the upper part of a wall. The rim is missing, but according to parallels they could have been either plain or flared as in the many Hellenistic examples from Dor (Guz-Zilberstein 1995:297, fig. 6.16:1–7) or thickened and projecting as in the single Herodian period fragment from Ramat Rahel (Aharoni 1962, fig. 28:15). The tradition of the appliqué mask connected to clay vessels continues till the 1st half of the 1st century CE in the Athenian Agora (Robinson 1959:32, pl. 6:G102). It seems that this tradition also reached Israel since similar appliqué kraters appeared in Hellenistic Dor (Erlich 2010:19, pl. 6).

Date range: 3rd cent. BCE to 50 CE

282 Krater

Reg. No. 79/A/73/142; Area A, Locus 1001

Wall fragment. On the external wall there was an appliqué decoration of satyr head. Light reddish-brown ware (5YR6/3), dark red wash (2.5YR4/8). Many medium black grits, hard fired.

283 Krater

Reg. No. 79/Y/68/321; Area Y, Sq. Y13, Locus L–8, Bucket 65

Wall fragment. On the external wall there was an appliqué decoration of a satyr head. Reddish-yellow ware (5YR7/6), red slip (10R5/8), medium fired.

9.1.8.3. Early Roman Kraters

A. Projecting Flattened Rim (Nos. 284–285)

Projecting rim flattened on top, rounded wall, ring base and two loop horizontal handles below rim. The type was adapted by both the Galilean industry (Berlin 1997:136, pl. 42:400–402) and the Judean inhabitants who imitated the shape in their local workshops. During the Hellenistic period the type was very popular at coastal sites and appear during the 3rd–2nd century BCE in Ashdod (Dothan 1971, fig. 61:9–11), Dor (Guz-Zilberstein 1995:296, fig. 11:1–4), Yoqne‘am (Avisar 1996:51, fig. X.2:6), Shiqmona (Elgavish 1974:51, pl. XIII:225). During the Early Roman period the type began to be manufactured in the southern region, probably in the Jewish settlements. The Jaffa fabric and shape are identical to the Early Roman Judean examples from Masada, the Jewish Quarter of Jerusalem, Jericho and Machareus (Bar-Nathan 2006:125–126, pl. 23:4–6; Geva and Rosenthal-Heginbottom 2003:179, pls. 6.2:35; 6.6:11–13; 6.9:22–23; 6.10:15; Bar-Nathan 2002:76–77, pl. 13:170–171; Loffreda 1996:98–9, fig. 43:24–29).

B. S-Shaped Rim (No. 286)

The rim and shoulder form an S curve and a flange lip. The type can be defined according to parallels from Masada (Bar-Nathan 2006:126–7, pl. 23:7–13) and other Judean sites such as Machaerus (Loffreda 1996:97, fig. 42:11–24), Herodium (Bar-Nathan 1981, pl. 6:1–3), Jericho (Killebrew 1999:116–7, pl. III.56:16). The type was a late development of the Projecting Rim Krater that continued to be used from the late 2nd/1st century BCE till the 1st century CE and was probably made in local workshops (Geva and Rosenthal-Heginbottom 2003:179, pls. 6.2:53; 6.6:11–13; 6.9:22–23; 6.10:15). Later versions of the same form continued to be used at the Jewish Quarter of Jerusalem during the Byzantine period (Magness 2000:428, pl. 18.2:9).

C. “Pie Crust” Rim (Nos. 287–288)

Projecting rim with “pie crust” pattern on lip, steep wall creating deep body, usually ring base. The type is limited to Judea and can be identified as another Early Roman development of the local deep krater. Similar examples were found in the Jewish Quarter of Jerusalem (Geva 2003:137, pl. 5.5:17; 178, pl. 6.6:8), in Binyanei ha-Uma (Berlin 2005:50, fig. 18:4–5; Rosenthal-Heginbottom 2005:265, no. 135–6), in Masada (Bar-Nathan 2006:126–7, pl. 24:14–16), Machaerus (Loffreda 1996:97, fig. 43:14), and Jericho (Bar-Nathan 2002:77–78, 263, pl. 13:175–6).

Date range: Early Roman

284 Krater

Reg. No. C/65/B901.2; Area C, Sq. CC102, Bucket 901

Rim diam.: 31.5; Max h.: 5

Projecting rim, rounded wall, remains of handles. Hard fired.

285 Krater

Reg. No. C/65/B901.1; Area C, Sq. CC102, Bucket 901

Rim diam.: 29; Max h.: 6

Projecting rim with external groove below rim, rounded wall.

286 Krater

Reg. No. C/61/B614.1; Area C, Sq. IV, Bucket 614

Rim diam.: 31; Max h.: 7

Flared rim, carinated shoulder. Very pale brown ware (10YR7/4) and light yellowish-brown core (10YR6/4), many medium white grits, hard fired.

287 Krater

Reg. No. C/61/B134.1; Area C, Sq. DD100, Locus 414, Bucket 134

Rim diam.: 31.5; Max h.: 4

Flared rim with thumb pressed decoration on rim, straight wall. Red ware (2.5YR5/6), many minute white black and quartz grits, hard fired.

288 Krater

Reg. No. C/61/B297.1; Area C, Sq. DD102, Bucket 297

Rim diam.: 34.5; Max h.: 5

Shelf rim with thumb pressed decoration below rim, sloping wall. Weak red ware (2.5YR6/4) and dark reddish-gray core (2/5YR5/1), hard fired.

9.1.8.4. Late Roman Stepped Rim Kraters (Nos. 289–290)

Outfolded rim with three ridges on the internal face. No identical parallels were found except for two bowls from the 2nd century CE pit in Shiqmona with internal ribbed walls made of heavier ware (Elgavish 1977:18–19, pl. I:7; XI:89–90). A similar type was found as well in Benghazi, dated from the 2nd to the 3rd century CE (Riley 1979:340, fig. 124:886–8).

Date range: 2nd–3rd cents. CE

289 Krater

Reg. No. 79/G/64/022; Area G, Sq. 28 Buckets: 68, 80

Rim diam.: 32.5; Max h.: 4

Thick and flared rim with three sharp ridges on interior rim, sloping wall. Pink ware (5YR7/4) and yellowish-red core (5YR5/6). Many small white and black grits, medium fired.

290 Krater

Reg. No. 79/G/64/066; Area G, Sq. 28, Bucket 75

Rim diam.: 31.5; Max h.: 4

Thick and flared rim, three sharp ridges on interior rim, sloping wall.

Pink ware (2.5Y8/3) and reddish-gray core (2.5Y7/1), many small white and black grits, medium fired.

9.2. Utility and Cooking Vessels

9.2.1. Basins

Basins appeared in Roman times and did not change remarkably until the Byzantine period. In Israel they were found in connection with the Roman legions. For example, in a coastal site directly connected with the Tenth Legion such as Caesarea or in the Jerusalem vicinity.

The basin was used for different purposes, such as grinding, mixing, and preparing food stuffs for household or industrial purposes.

In Jaffa, a wide range of basin types were found, mostly in the later levels of the residential house in Area C.

9.2.1.1. Roman Basins

Arched Rim (Nos. 291–293)

Wide and heavy arched rim, grooved on top.

In Jaffa, two rim sherds were found in Area G (487–8). The type was probably also connected to the Roman legion repertoire even though it was less commonly found at sites in Israel. The only parallels were found at Shiqmona, dated to the 2nd century CE (Elgavish 1977:18–19, pls. I:7; XI:89–90). Similar but not identical examples appeared in Jerusalem, at the Binyanei ha-Uma site that is also dated from the 2nd to the 3rd century CE (Berlin 2005:95, fig. 29:3, 4). In Benghazi, a similar locally made type was found with ribs on the internal wall and a wide heavy flat base, dated from the late 2nd to the 3rd century CE (Riley 1979:339–40, fig. 124:886–8).

Date range: 2nd–3rd cents. CE

291 Basin

Reg. No. C/61/B185.2; Area C, Sq. DD100, Locus 414, Bucket 185

Rim diam.: 33; Max h.: 4

Thick and flared rim. Red ware (2.5YR6/6) and weak red core (2.5YR5/4). Many minute red grits, hard fired.

292 Basin

Reg. No. C/61/B218.2; Area C, Sq. D100, Locus 414, Bucket 185

Rim diam.: 37.5; Max h.: 6.5

Flared rim, rising obliquely, with thick lip, sloping wall. Pink ware (5YR7/4), many small black grits, hard fired.

293 Basin

Reg. No. C/61/B538; Area C, Sq. DD101, Locus 429, Bucket 538

Rim diam.: 36; Max h.: 3.5

Thick flared rim, heavy wall. Pink ware (5YR7/3), a few small white grits, many small black and medium red grits, hard fired.

Shelf Rim (Nos. 294–296)

Wide projecting rim, slightly uprising at thickened lip. Narrow steep wall, rounded base, creating a pseudo cooking pot appearance.

A few examples were found in Jaffa. The first example (294) of that type was found in large quantities in the Jerusalem vicinity. Their form was initially interpreted as a cooking bowl, however, the lack of soot defined the type as a basin. Similar basins were found in relation to broken tiles stamped with the insignia of the Tenth Legion in the Jewish Quarter of Jerusalem. It seems that this type was part of the Roman pottery repertoire typical of the late 1st to the late 3rd century CE (Hershkovitz 1987:316). Magness also dated the type from the late 1st to the 3rd century CE (Magness 1993:202).

Date range: late 1st–3rd cents. CE

294 Basin

Reg. No. C/61/B89.1; Area C, Sq. DD100, Bucket 89

Rim diam.: 27; Max h.: 6

Heavy shelf rim, rising obliquely, straight wall. Light reddish-brown ware (5YR6/4), pinkish-white wash (5YR8/2), a few medium white and black grits, hard fired.

295 Basin

Reg. No. C/61/B125.2; Area C, Sq. DD100, Locus 414, Bucket 125

Rim diam.: 25.5; Max h.: 2.5

Heavy shelf rim rising obliquely. Very pale brown ware (10YR7/3) and reddish-yellow core (7.5YR6/6), many minute black grits, hard fired.

296 Basin

Reg. No. A/73/B555.2; Area A, Locus 752, Bucket 555

Rim diam.: 38; Max h.: 6

Uprising rim with folded lip, straight wall. Very pale brown ware (10YR8/2) and light yellowish-brown core (10YR6/4), many small white grits, hard fired.

Squarish Rim (Nos. 297–305)

Large projecting square rim and sometimes a hanging down lip. The ware is hard fired and the fabric is coarse and grained. The combination of the ware with its volcanic rock suggests that they were manufactured in Cyprus, as well as in some other localities along the north and northeast coast of the eastern Mediterranean

(Hayes 1978:38, fig. 6:11 [Carthage, early 2nd century CE]). Their similarity in fabric to the Persian “Levantine Mortaria” indicates the possibility of continuity in manufacture for about one millennium in the northeast part of the Mediterranean.⁵⁴

The basins are widely distributed in the northeast part of the Mediterranean from the 2nd to the 4th century CE. Following Blakely’s distribution studies (Blakely 1992), the type is well known at northern Jewish sites such as Khorazin, Beth She’arim, Nazareth, Shepherds Field, as well as on north coastal sites such as Shiqmona (Elgavish 1977:18–19, pl. 1:6; pls: XI:85–88) and Caesarea (Blakely 1992:203). In Jaffa, the squarish rim basin is one of the most common pottery types at the residential house in Area C. Two complete basins (297–298) and many rim fragments (299–305) were recovered in the late levels 2–4, dated to the 2nd century CE.

The wide distribution of the basins in the north and on the Coastal Plain of Israel supports the assumption of Syrian origin, probably in relation to the manufacturing centers of the North Syrian Mortaria. However, at the same time, the squarish rim basin is well known along with other imported basins types in Jerusalem. Its appearance at the Binyanei ha-Uma site was connected with the Roman Tenth Legion (Berlin 2005:95, fig. 29:6–8) and can be another explanation for the popularity of the type in Roman settlements such as Jaffa.⁵⁵ At Caesarea, this type was the most common among the Mortaria at the site (Magness 1992b:130) and was included in almost all published Late Roman contexts in Caesarea (Oleson 1994:39, fig. 9:k25; Blakely 1987:109, and fig. 34:116; Riley 1975:36, nos. 41–42; Magness 1992b:130, fig.58:11; Bar-Nathan et al. 1986, fig. 2:23; Blakely 1992:202–3, fig. 2:5, 18, 26–8). At Jalame 276 fragments were recovered that make this the most common basin at the site (Johnson 1988:183, fig. 7–31:488–493). At Sumaqa, 70.3% of 61 fragments belong to the squarish rim basin type (Kingsley 1999:281, fig.5:3,5–6).

Date range: 2nd–4th cents. CE

297 Basin

Reg. No. 79/C/61/434; Area C, Bucket 597, 666

Rim diam.: 40; Base diam.: 26; Max h.: 9.5

Squarish rim flattened on top, heavy sloping wall, broad flat base. Pink ware (7.5YR7/4), many small white and black grits, many big red grits, hard fired.

298 Basin

Reg. No. 79/C/65/597; Area C, Bucket 831

Rim diam.: 38; Base diam.: 25; Max h.: 9.5

Squarish rim flattened on top, heavy sloping wall, wide flat base. Pink ware (7.5YR7/4), many small white and black grits, many big red grits, hard fired.

299 Basin

Reg. No. C/65/B902.1; Area C, Sq. CC102, Bucket 902

Rim diam.: 39.5; Max h.: 5

Squarish rim flattened on top, heavy sloping wall. Pink ware (5YR7/4), many medium white black and red grits, hard fired.

300 Basin

Reg. No. C/61/B300.3; Area C, Sq. DD102, Bucket 300

Rim diam.: 37.5; Max h.: 4

Squarish rim flattened on top, heavy sloping wall. Pink ware (5YR7/4), many medium white black and red grits, hard fired.

301 Basin

Reg. No. C/61/B88; Area C, Sq. IV, Bucket 88

Rim diam.: 35; Max h.: 3.5

Squarish rim, sloping wall. Brown ware (7.5YR5/4), dusky red core (2.5YR4/4), many large white and black grits, hard fired.

⁵⁴ Blakely 1992:203. They were studied as a group through analytical procedures performed over the Caesarea fortification walls Mortaria and Basins (Area G8). However, the geology of Israel precludes it as a place of manufacture.

⁵⁵ Kaplan mentions a roof tile with a Tenth Legion stamp from this area. It could not be identified.

302 Basin

Reg. No. C/61/B178.2; Area C, Sq. DD100, Locus 414, Bucket 178

Rim diam.: 33.5; Max h.: 6.5

Squarish rim flattened on top, heavy sloping wall. Pink ware (5YR7/4), many medium white black and red grits, hard fired.

303 Basin

Reg. No. C/61/B184.1; Area C, Sq. DD100, Locus 414, Bucket 184

Rim diam.: 31; Max h.: 3

Squarish rim flattened on top, heavy sloping wall. Pink ware (7.5YR7/4), many medium white black and red grits, hard fired.

304 Basin

Reg. No. A/73/B587; Area A, Locus 752, Bucket 587

Rim diam.: 33; Max h.: 4

Squarish rim flattened on top, heavy sloping wall. Very pale brown ware (10YR7/4), many medium white black red and gray grits, hard fired.

305 Basin

Reg. No. C/61/B672; Area C, Sq. DD101, Locus 434, Bucket 672

Rim diam.: 30; Max h.: 4.5

Heavy shelf rim rising upward, rounded wall. Very pale brown ware (10YR8/4), many minute black grits, hard fired.

Household Pots (Nos. 306–310)

In Jaffa, a few unknown types of domestic containers were found made of coarse ware and that probably served as household pots. Most of them were recovered in the dwelling house in Area C and can be dated to the Early Roman period. At Caesarea, pots were found similar to nos. 308, 310 (Gendelman 2007:49, fig. 4.2:17–20). Nos. 306–307 were identified in Benghazi as miscellaneous Early Roman plain ware (Riley 1979:337, fig. 123:845).

Date range: Early Roman

306 Pot

Reg. No. C/65/625; Area C

Rim diam.: 24; Max h.: 3.5

Evereted thick rim, rounded heavy wall, luged handle attached to rim. Pink ware (5YR7/4) and yellowish-red core (5YR5/6). Many small white grits, hard fired.

307 Pot

Reg. No. C/61/B286.2; Area C, Sq. DD102, Bucket 286

Rim diam.: 22; Max h.: 3.5

Thick shelf rim raising upward, rounded wall. Light brown ware (7.5YR6/4), many small black and white grits, medium fired.

308 Pot

Reg. No. C/61/B286.2; Area C, Sq. DD102, Bucket 286

Rim diam.: 28; Max h.: 4

Thick rim concaved on top for receiving a lid?, rounded wall. Red ware (2.5YR5/6), many minute white and black grits, medium fired.

309 Pot

Reg. No. C/61/B591; Area C, Sq. DD101, Locus 429, Bucket 591

Rim diam.: 30; Max h.: 3.5

Wide shelf rim with double grooves on top, carinated wall. Light brown ware (7.5YR6/4) and reddish-yellow core (7.5YR6/8), small and large white grits, hard fired.

310 Pot

Reg. No. A/72/B114.3; Area A, Sq. K4, Bucket 114

Rim diam.: 17.5; Max h.: 5

Flared rim, rounded wall. Reddish-yellow ware (5YR6/6) and dark gray core (5YR4/1), many small black grits, hard fired.

Miscellaneous (Nos. 311–314)

A few variations of the Roman basin were found in Jaffa, all of them characterized by a thick and heavy wall made of fine hard fired fabric.

The Arched Rim basin (311) can be paralleled to a typical Jerusalem Byzantine arched rim basin (Magness 1993:204, nos. 1–15) that is characterized by a deeper body but the fine well fired fabric is identical. A second example from Jaffa is characterized by a thick projecting rim and shallow body (312). A similar example from Binyanei ha-Uma in Jerusalem displays two loop handles below the rim and is dated from the 2nd to the 3rd century CE (Magness 2005:95, fig. 28:8). The third is probably of Egyptian origin due to the coarse and crispy ware (313). No. 314 was found in a Mid-Roman context.

311 Basin

Reg. No. C/61/B297.2; Area C, Sq. DD102, Bucket 297

Rim diam.: 25.5; Max h.: 5

Arched rim hanging downward on external lip, rounded wall. Pink ware (7.5YR7/3) and light brown core (7.5YR6/4), many minute black grits, hard fired.

312 Basin

Reg. No. C/61/620; Area C, Bucket 699

Max h.: 4.5

Broad and flattened on top rim, flared heavy wall. Pink ware, few medium white and black grits, many large red grits, hard fired.

313 Basin

Reg. No. C/61/B51; Area C, Sq. CC100, Bucket 51

Rim diam.: 36; Max h.: 5.5

Thickened rim, heavy coarse wall. Weak red ware (2.5YR5/4), dusky red wash (2.5YR4/4). Many small gold mica, hard fired.

314 Basin

Reg. No. C/61/B130.1; Area C, Sq. DD100, Locus 414, Bucket 130

Rim diam.: 35; Max h.: 3

Folded rim with hanging down lip, sloping wall. Reddish-yellow ware (5YR6/6), a few minute white grits, hard fired.

9.2.2. Mortaria

The traditional Greek Mortarium was made in Corinth (Sparkes and Talcott 1970:221–223). The Mortarium was design to grind and crush food, even though many researchers tried to attribute other functions to this large bowl (Blakely 1989). The typical Mortarium is a large rough vessel, undecorated, with a thick and very coarse wall and a thickened or extended rim, to provide a handhold. The extremely coarse fabric with many large inclusions provides a convenient surface for food grinding. The worn interior, particularly in the center of floor, confirms this assumption.

9.2.2.1. Persian Mortaria

Persian mortaria are large mold-made and rough bowls of extremely coarse fabric. The rim is usually thickened to provide a handhold, the wall is thick and frequently ribbed on its external face, and the base is flat or ring based. This type of household ware contains coarse, sharp inclusions.

The Persian mortarium was first discussed by Petrie at Tell el-Hesi (Petrie 1891: 48, pl. IX:222–24) and more recently by many others such as Rast (1978:50), Gitin (1990:235–6),⁵⁶ Berlin (1997:126–7) and Tal (1999). It was found along the shores of the Mediterranean from Asia Minor to Egypt and in Cyprus, but is most common in Western Palestine (Stern 1978, 1982). Stern divided the mortaria into two morphological subtypes. Type 1 was an early type with a flattened base and Type 2 was a later type with a ring base.

The following types were found in Jaffa.

Cypriot Type (Nos. 315–318)

Broad thickened and rolled rim, coarse and heavy wall slightly ribbed on external face, high splayed ring base. Pedestal foot.

The vessels were widespread throughout the Levant and appear at every Persian site in Israel.⁵⁷ Their presence can almost be considered the hallmark of the period therefore they received the nickname “Persian Bowl” after Stern (1978:31; 1982:98–9). Bennett and Blakely dedicated an extended technical analysis study to the Mortaria from Tell el-Hesi that led them to the conclusion that they were not locally made but rather “Levantine Mortaria” made in Syrian or northeast of Israel (Bennett and Blakely 1989:196–203). According to the thin section analysis of vessels from Tel Anafa, their origin was defined in North Syria or southwestern Anatolia so it may be considered Phoenician (Berlin 1997:124). The claim for their foreign origin somewhere in the Levant was strengthened in Lehmann’s studies of the Syrian and Lebanese assemblage where they appear to have been in common use in 540–360 BCE (Lehmann 1998:fig. 9:6). On the other hand, a thin section analysis of three samples from Apollonia suggested a Cypriot/Aegean origin (Gorzalczany 1999:186).

As shown by the distribution pattern, their first appearance in Israel occurred during the late 6th century and reached its peak during the 5th century BCE (Lapp 1970:185, fig. 7:13–14, 16). Recent studies confirm that they continued to be in use, in small quantities, until the Early Hellenistic period. At Apollonia, they represent 14.58% of the common ware at the early Persian level in Area H and 6.81% of the common ware of the late Persian level (Tal 1999:97–8, fig. 4.11:7–16; 154, fig. 4.35:13–18). They appear in small quantities in the Early Hellenistic stratum in Area H, dated from the late 4th to the mid-2nd century BCE (Fischer and Tal 1999:230, fig. 5.7:10–13). At Tel Michal they were recovered in all excavated levels including the cemetery (Singer-Avitz 1989, fig. 9.16). At Tel Anafa, 32 fragments were recovered in the Hellenistic contexts, and one was attributed to the late 1st century BCE (Berlin 1997:126, pl. 38:341–347). At Tel Keisan they were also dated from the late 4th to the 2nd century BCE (Briend 1980:108, pl. 12:1–3).

In Jaffa, the type is found in great frequency and many fragments were recovered from all excavated areas, among them a few complete vessels (381–383). One unique complete mortarium was squatted, probably by mistake (383). It is interesting to note that a similar mortarium was recovered from Tel Mevorakh (Stern 1978:31, fig. 4:13 and pl. 22:8).

Date range: late 6th–2nd cents. BCE

315 Mortarium

Reg. No. 79/A/56/265; Area A, Sq. F6

Rim diam.: 33; Base diam.: 14.5; Max h.: 12

Thickened rim, rounded ridged body, high ring base flaring downward. Very pale brown ware (10YR7/4), hard fired.

316 Mortarium

Reg. No. 79/Y/62/013; Area Y, Bucket 24

Rim diam.: 29; Base diam.: 15.5; Max h.: 8.5

Thickened rim, rounded ridged body, high ring base flaring downward. Pink ware (7.5YR7/4), many big white and black grits and a few big red grits, hard fired.

317 Mortarium

Reg. No. 79/A/73/101; Area A, Locus 1001, Bucket 46

⁵⁶ Gitin divided the Gezer mortaria into four basic classes according to four rim types and five ware types.

⁵⁷ See Berlin 1997:126–7 for a complete list of distribution sites in Israel.

Base diam.: 14; Max h.: 9

Thickened rim, rounded ridged body, high ring base flaring downward. Pale red ware (2.5Y7/3), many medium white and black grits, a few medium red grits, hard fired.

318 Mortarium

Reg. No. 79/G/64/046; Area G, Sq. 25, Locus 501, Bucket 45

Rim diam.: 33; Max h.: 4

Thickened rim, rounded ridged body. Very pale brown ware (10YR7/3) and red core (2.5YR6/6), many big white and a few big gray grits, hard fired.

Flattened Base

Heavy bowl with thickened rim and flat or hollow disc or pseudo low ring base. The flattened base mortarium is well known on the eastern coast of the Mediterranean from Cilicia to Egypt, especially in Cyprus and Rhodes where they probably originated during the late 7th century. This assumption is supported by the fact that their earliest occurrence along the east coast was in the oldest Greek settlements such as al-Mina in Syria, Mesad Hashavyahu in Palestine and Naucratis in Egypt (Stern 1978:31, fig. 4:24; Stern 1982:98–100, Type 1). According to the Syrian and Lebanese assemblage, the flattened base mortarium continued to appear during the transition from the Iron Age to the Persian period in that region, ca. 580–540 BCE (Lehmann 1998, fig. 8:7–8). During the Persian period the type was adopted by the local repertoire and distributed mostly along the Coastal Plain. The type is generally characterized by a flattened base even though it appears in different wares and shapes. The type can be divided according to its morphological and chronological development into five subtypes.

A. Thickened Rim (Nos. 319–322)

Thickened rim, sometimes with triangular profile, round to sloping roughly smoothed walls. In Jaffa examples the flat bases are missing. The knobbed rim mortarium continued to be in use for a long period of time. They were made of very heavy dark reddish or brownish-gray fabric. At Apollonia, they occurred as early as the late 6th century but did not continue into the Hellenistic period (Tal 1999:98, fig. 4.11:17; 154–5, fig. 4.35:19). At Tel Keisan, the type appears in the Persian period as well (Nodet 1980:122, pl. 20:15–21). A complete mortarium with a hollow disc base that was classified by Lapp as belonging to Group V (332 BCE) can be an indication of their continued use in the Hellenistic period (Lapp 1970:185, fig. 10:5). At Dor, for example, they appear in the Persian and Early Hellenistic levels while preserving the same rim shape and other morphological characteristics (Stern 1995:53, fig. 2.2:11–12; 295, fig. 6.9:1–7).

The thickened rim mortarium at Tel Anafa seems to be of similar shape and origin as those from Jaffa and other sites. They appear throughout the Hellenistic period (Berlin 1997:127–8, pl. 38:348–356).

Date range: Persian–Early Hellenistic

B. Infolded Rim (Nos. 323–324)

Thickened infolded rim, thinner wall slightly ribbed at external face. In Jaffa, the base is missing, but according to parallels this type had a flat base. It was considered a late Persian development of the “Levantine Mortarium” (Gitin 1990:235, pl. 30:17). Similar vessels were found at Tel Mevorakh and Tel Keisan dated to the Persian period (Stern 1978:30–1, fig. 4:23–24; Nodet 1980:122, pl. 20:18–19).

Date range: Persian

C. Flared Rim (No. 325)

Out-turned rim, shallow wall, slightly ribbed on exterior face.

In Jaffa, a single example of medium size bowl was found. The missing base was probably flat. At Tel Keisan, similar fragments were common in the Iron Age stratum dating to the 7th century BCE and continued in the Persian stratum dated to 450–380 BCE (Nodet 1980:122, pl. 20:16). At Tel Qiri, the same kind of vessel appeared below the upper Persian floor dated to the 2nd half of the 5th century and later (Avisar

1987:16, fig. 30). However, in Apollonia, an example with a more flared rim was dated from the mid-5th early 4th century BCE (Tal 1999:154, fig. 4.35:5).

Date range: Persian

D. Outfolded Rim (No. 326)

Outfolded rim with concaved external face, thick sloping wall. A single complete parallel was found at Tel Michal dated to the end of the Persian period (Singer-Avitz 1989:133, fig. 9.11:1).

Date range: late Persian

E. Knobbed Handles (Nos. 327–330)

Everted rim, flaring wall and two knobbed handles below rim. The knobbed rim mortaria was common in Israel during the 5th and 4th centuries BCE.

In Jaffa, various rim shapes were recovered. Two fragments displayed elongated thickened rims with red bands on upper internal wall (393–394). A similar mortarium was recovered from the 5th–4th centuries levels in Dor (Guz-Zilberstein 1995:53–55, fig. 2.2:7–8) and Gezer (Gitin 1990:235–6, pl. 30:2). Lapp dated the type to late 5th century BCE (Lapp 1970:184–5, fig. 7:7). A third mortarium with slightly projecting rim (395) can be paralleled to similar Persian example from Dor (Guz-Zilberstein 1995:53–55, fig. 2.2:13). A 4th example with outfolded rim had no parallels (396).

Date range: 5th–4th cents. BCE

319 Mortarium

Reg. No. 79/A/56/182; Area A, Sq. H6

Rim diam.: 35.6; Max h.: 6.5

Thickened triangular rim, straight wall. Pink ware and core (7.5YR7/3), hard fired.

320 Mortarium

Reg. No. A/71/B144; Area A, Sq. I3, Bucket 144

Rim diam.: 32; Max h.: 6.5

Thickened triangular rim, straight wall. Very pale brown ware (10YR7/3), many medium white and black grits, hard fired.

321 Mortarium

Reg. No. 79/G/64/049; Area G, Sq. 29, Bucket 85

Rim diam.: 29.5; Max h.: 5

Knobbed rim, heavy rounded wall. Reddish-yellow ware (5YR6/6) and red core (2.5YR5/6), a few big white black and gray grits, hard fired.

322 Mortarium

Reg. No. C/61/600; Area C, Sq. CC102, Bucket 699

Rim diam.: 29.5; Max h.: 5.7

Thickened triangular rim, straight wall. Pale red ware (2.5Y7/3), many small white grits and a few minute black grits, hard fired.

323 Mortarium

Reg. No. A/71/B299; Area A, Sq. J3, Bucket 299

Rim diam.: 34; Max h.: 6.3

Infolded rim, rounded wall. Very pale brown ware (10YR7/3) and pale brown core (10YR6/3), many minute black grits, hard fired.

324 Mortarium

Reg. No. A/71/B14; Area A, Sq. H4, Bucket 14

Rim diam.: 42.5; Max h.: 6

Infolded rim, rounded wall. Very pale brown ware (10YR8/3) and pale brown core (10YR6/3), many small black grits, hard fired.

325 Mortarium

Reg. No. A/72/B352; Area A, Sq. I4, Locus 500a, Bucket 352

Rim diam.: 31; Max h.: 4.5

Flared rim, sloping wall. Pale red ware (2.5Y7/3) and weak red core (2.5Y6/3), a few small red grits, hard fired.

326 Mortarium

Reg. No. A/71/B144.3; Area A, Sq. I3, Bucket 144

Rim diam.: 35.6; Max h.: 4.5

Collar rim, sloping wall. Pink ware (7.5YR7/4), many small white grits, hard fired.

327 Mortarium

Reg. No. 79/A/56/183; Area A, Sq. I8

Rim diam.: 47.8; Max h.: 5

Thickened rim, straight wall, two lugged handles. Pinkish-gray ware (7.5YR7/2) and reddish-yellow core (5YR6/6), yellowish bands on inner face. Many minute white grits and a few small black grits, hard fired.

328 Mortarium

Reg. No. 79/Y/68/304; Area Y, Sq. X12, Locus L-1, Bucket 134

Rim diam.: 45.5; Max h.: 4.3

Thickened rim, straight wall, two lugged handles attached to rim. Pink ware (7.5YR7/3) and brown core (7.5YR5/3), many large white grits and many medium black grits, hard fired.

329 Mortarium

Reg. No. 79/J/70/061; Area J, Bucket 37

Rim diam.: 41.5; Max h.: 3

Thickened rim, straight walls, two lugged handles attached to rim, fluted spout. Very pale brown ware (10YR8/4) and pink core (7.5YR7/4), many small black grits, hard fired.

330 Mortarium

Reg. No. 79/Y/64/075; Area Y, Sq. 5, Bucket 61

Rim diam.: 33; Max h.: 3

Thick out-turned rim, lugged handle attached to rim. Pale red ware (2.5Y7/3), many small black grits, a few small quartz grits, hard fired.

9.2.2.2. Hellenistic Mortaria

Heavy Walled (Nos. 331–335)

Thickened rim and wall, disc base. In contrast to the other mortaria types the fabric is very coarse and heavy with large inclusions.

In Jaffa, two subtypes were found, the first with a deeper body and rounded wall (331–333) and the second with a shallow body (334–335). Except for the appearance of the first subtype in a Persian context at Tel Mevorakh (Stern 1978:31, fig. 4:21–22), most of the parallels point toward Hellenistic dating. The type appears at Early Hellenistic levels in Dor (Stern 1995:295, fig. 6.9:12), Gezer (Gitin 1990:255, pls. 33:18; 34:12), and Samaria (Lapp 1961:168, Type 41.f–g, 200–150 BCE). A similar complete mortarium with knobbed handles was recovered from Tel Michal and dated to 400–350 BCE (Singer-Avitz 1989:130, fig. 9.9:1).

Date range: Persian–Early Hellenistic

331 Mortarium

Reg. No. 79/Y/64/086; Area Y, Sq. 8, Locus 614, Bucket 108

Rim diam.: 37.5; Base diam.: 21; Max h.: 9.5

Plain rim, heavy sloping wall, disc base. Reddish-brown ware (5YR5/4) and many minute black grits, hard fired.

332 Mortarium

Reg. No. 79/H/64/013; Area H, Sq. 1, Locus 401, Bucket 28

Rim diam.: 46; Max h.: 8.7

Incurved rim, heavy wall, two loop handles attached from rim to wall. Pink ware (7.5YR7/4), brown core (7.5YR5/4), a few big white grits and many big black and gray grits, hard fired.

333 Mortarium

Reg. No. 79/A/73/099; Area A, Locus 1000, Bucket 79

Rim diam.: 34; Base diam.: 22.5; Max h.: 11.5

Incurved rim, rounded heavy wall, disc base. Reddish-brown ware (5YR5/4), pink wash (7.5YR7/3).

Many medium white and gray grits, hard fired.

334 Mortarium

Reg. No. 79/A/73/100; Area A, Locus 1001, Bucket 46

Rim diam.: 29; Base diam.: 12.5; Max h.: 7

Incurved rim, heavy shallow wall, flat base. Reddish-brown ware (5YR5/4) and yellowish-red core (5YR5/8). Many small white grits, hard fired.

335 Mortarium

Reg. No. A/70/B200.1; Area A, Sq. K4, Bucket 200

Rim diam.: 22; Max h.: 6.5

Plain rim, heavy rounded wall. Light reddish-brown ware (5YR6/4) and yellowish-red core (5YR5/6), many small white and black grits, hard fired.

Fluted Spout (Nos. 336–339)

Projecting rim with fluted spout, heavy walls and flat base. The fine fabric defined them as imported mortaria. The earlier spouted mortaria in the Athenian Agora were manufactured in Corinth in the mid-5th century BCE onward but they do not become prominent until the Hellenistic period (Sparkes and Talcott 1970:222, pl. 90:1898, 1904, 1905, 1909).

The Jaffa examples had various projecting rims usually slightly concaved. In contrast to Dor's mortaria they lack the thumb decorated rim. At Dor, this type accounted for 15–30% of the kraters from the 4th to the 3rd centuries BCE (Guz-Zilberstein 1995:295–6, fig. 6.10:5–10).

Date range: 4th–3rd cents. BCE

336 Mortarium

Reg. No. 79/Y/64/076; Area Y, Sq. 4, Locus 606, Bucket 43

Rim diam.: 33; Max h.: 2.5

Convex shelf rim with fluted spout. Very pale brown ware (10YR7/3), many small gray grits, hard fired.

337 Mortarium

Reg. No. 79/Y/68/331; Area Y, Sq. Y14, Locus L–13, Bucket 62

Rim diam.: 30; Max h.: 6

Convex shelf rim with two grooves on top and fluted spout, rounded wall. Reddish-brown ware (5YR5/4–6), many big white and black grits, hard fired.

338 Mortarium

Reg. No. 79/A/55/100; Area A, Locus B

Rim diam.: 32; Max h.: 4.5

Convex shelf rim with fluted spout, rounded wall. Very pale brown ware (10YR7/3), many minute black grits, hard fired.

339 Mortarium

Reg. No. 79/J/70/087; Area J, Bucket 3

Rim diam.: 39.5; Max h.: 3.5

Convex shelf rim with fluted spout. Reddish-brown ware (5YR5/4), a few big white and red grits, many big brown grits, hard fired.

Arched Rim (No. 340)

Arched rim stepped on upper face with a hanging-down lip, sloping deep wall. A single fragment was found in Jaffa. The sole parallel was identified in Ramat Hanadiv as an unparalleled mortarium dated from the 4th to the 2nd century BCE (Silberstein 2000:441, pl. IX:19).

Date range: 4th–3rd cents. BCE

340 Mortarium

Reg. No. A/72/B31.1; Area A, Sqs. K3–L3, Locus 703, Bucket 31

Rim diam.: 44; Max h.: 6.4

Flanged rim, stepped on top, vertical wall. Pink ware (5YR7/4) and dark gray core (5YR4/1), very dark gray wash (5YR3/1), hard fired.

9.2.2.3. Early Roman Mortaria

Beaked Rim (No. 341)

In Jaffa, a single bowl was recovered, which is characterized by an arched rim with a small flange at the junction of the interior wall and rim. At Tel Anafa, ten fragments were found that were dated to the Early Roman period (Berlin 1997:125–6, pl. 41:390–392). Another parallel was found in the Athenian Agora dated to the 1st half of the 1st century CE (Robinson 1959:90, pl. 70: M65).

Date range: Early Roman

341 Mortarium

Reg. No. A/70/B24; Area A, Sq. K4, Locus 500, Bucket 24

Rim diam.: 25; Max h.: 7

Flanged rim tunneled on top, rounded wall. Very pale brown ware (10YR7/3), many small white and black grits, hard fired.

9.2.2.4. Late Roman Mortaria

North Syrian Type (Nos. 342–348)

Broad, arched rim furnished with a short shallow spout, high flaring wall and flattened base. In general, the maker's name or trademark in Greek or Latin is stamped on the rim. The stamp consists of two lines of impressed characters within a rectangular frame. In some cases the stamp is repeated at intervals around the rim. The ware is hard fired to a deep "chocolate" brown or orange brown color. The fabric is grained and is filled with inclusions.

Hayes conducted a full study of the North Syrian mortaria. He dated them to the 3rd–4th century CE and suggested that they have their origin in Ras el Basit in Syria. He based his suggestion on the presence of stamped kiln wasters over several miles at that location (Hayes 1967:337–47). Other centers could also have operated in this region (Blakely 1992:204). Recently stamped rims were found at El Age in Syria, as well as in Anthedon and Sheikh Zuweyd in northern Sinai (Ben Arie and Netzer 1974:91–4, pl. XXIX:4, fig 2:1), and Alexandria (Vallerin 1994:176). A second center of manufacture in Southern Israel near Raphia, as suggested by Ysraeli (1970) is unaccepted according to mineral analysis.

North Syrian mortaria are common in Syria, Israel, Egypt, and Cyprus and appear also in Turkey, Greece and Italy. A large quantity of North Syrian mortaria in Caesarea were studied in detail (Groh 1978:165–9). They display various kinds of rim shapes in addition to Greek or Latin stamps.

In Jaffa, large quantities of rim fragments were recovered. None of them bear the typical Caesarea stamp (Blakely 1992:204–5, fig.4:2). However, they are similar in fabric and shape to the many fragments from various excavated areas in Caesarea dated to the 3rd to 4th centuries CE (Oleson 1994:39, fig. 9:K28–29; Peleg and Reich 1992:153, fig. 16:2; Riley 1975:41–42, nos. 65–7). They were made of red or chocolate

color ware with large inclusions. Along the Coastal Plain the type appears also at Tel Mevorakh (Rosenthal 1978:14, fig. 1:7) and at Sumaqa on Mount Carmel (Kingsley 1999:280–1, fig. 5:7). Recently a few examples were discovered in Binyanei ha-Uma, Jerusalem dated from the 2nd to the mid-3rd centuries CE (Magness 2005:97–8, fig. 30:4–7).

Date range: 3rd–4th cents. CE

342 Mortarium

Reg. No. C/61/B1229; Area C, Bucket 1229

Rim diam.: 52.5; Max h.: 5

Heavy arched rim. Brown ware (7.5YR4/4), black wash (7.5YR2.5/1), many big white and black grits, hard fired.

343 Mortarium

Reg. No. C/61/870; Area C

Rim diam.: 52.5; Max h.: 5

Heavy arched rim. Red ware (2.5YR5/8), many small white, black and gray grits, many big black grits, hard fired.

344 Mortarium

Reg. No. C/61/544; Area C, Bucket 544

Rim diam.: 46.5; Max h.: 4

Heavy arched rim. Reddish-brown ware (5YR5/4) and yellowish-red core (5YR4/6), a few big white and black grits, hard fired.

345 Mortarium

Reg. No. A/71/B217; Area A, Sq. I2, Bucket 217

Rim diam.: 46; Max h.: 5.5

Heavy arched rim. Dark reddish-gray ware (5YR4/2), dark reddish-brown core (5YR3/3), many small black grits, hard fired.

346 Mortarium

Reg. No. C/61/B1849; Area C, Bucket 1849

Rim diam.: 44.5; Max h.: 4

Heavy arched rim overhanging downward. Pink ware (7.5YR8/4), many big white black and red grits, hard fired.

347 Mortarium

Reg. No. C/61/B849; Area C, Bucket 849

Rim diam.: 41; Max h.: 4

Heavy arched rim. Dark red ware (2.5YR4/6) and dark red wash (2.5YR4/6), many big white and black-grits, hard fired.

348 Mortarium

Reg. No. A/73/B170; Area A, Locus 752, Bucket 170

Rim diam.: 36; Max h.: 7

Heavy arched rim. Light reddish-brown ware (5YR6/4) and yellowish-red core (5YR5/8), many large white and black grits, hard fired.

9.2.3. Byzantine Water-Wheel Pot

Ribbed Body (Nos. 349–353)

A deep jug-like vessel for drawing water from wells, known in Egypt as a *kadus*.⁵⁸ Everted rim, bag shaped body and pointed base. The fabric is coarse and sandy, of local manufacture and with medium to soft appearance, since most of them were found in a well context. The wall is deeply ribbed from top to bottom.

⁵⁸ Nir 1993:77–82.

The massive occurrence of these pots in relation to Roman until modern time wells and the morphological handleless shape support the suggested function as a jug for drawing water. The pot was fastened by a bounded rope around its rim to a water wheel in a continuous chain, and as the wheel turned each pot dipped into the well, came up and poured the water.

The Jaffa types displayed two rim shapes: everted (349–351) and flaring (352–353).

Both seem to be made of the same fabric and were probably manufactured at a regional production center during the 4th–5th century CE. Similar pots were found in Ramat Hanadiv, Khirbet Ibriktas, Caesarea, and Tell Qasile (Calderon 2000:147, pl. XXV:75; Kletter and Rapuano 1998:52–3, fig. 4:12; Riley 1975:36, fig. 36:38; Ayalon 2000:223, fig. 3.2). The Jaffa type was probably part of the northern Coastal Plain tradition popular from the Late Roman to the Middle Ages in Israel. At Sumaqa and Beth-Shean, another kind of water-wheel pot was found that lacked the bag-shaped body and was of a smaller size. They were probably used for the same purpose (Kingsley 1999:282, fig. 12:18; Hayes 1976:61, no.334).

Date range: Late Roman

349 Water-wheel pot

Reg. No. 79/A/73/149; Area A, Locus 752

Rim diam.: 9.5; Max h.: 17

Everted channeled rim, ribbed body widening downward, pointed base. Brown ware (7.5YR5/3) and red core (2.5YR5/6), many minute black grits, medium fired.

350 Water-wheel pot

Reg. No. 79/A/73/146; Area A, Bucket 654

Rim diam.: 9; Max h.: 16.5

Everted channeled rim, ribbed body widening downward, pointed base. Weak red ware (2.5YR5/3), hard fired.

351 Water-wheel pot

Reg. No. 79/A/72/158; Area A, Locus 752, Bucket 460

Rim diam.: 9.7; Max h.: 17

Everted channeled rim, ribbed body widening downward, pointed base. Weak red ware (2.5YR5/4), hard fired.

352 Water-wheel pot

Reg. No. 79/A/73/150; Area A, Bucket 634

Rim diam.: 9; Max h.: 19

Everted channeled rim, ribbed body widening downward, pointed base. Weak red ware (2.5YR6/4), hard fired.

353 Water-wheel pot

Reg. No. 79/A/72/157; Area A, Bucket 489

Rim diam.: 9.9; Max h.: 16.5

Everted rim, ribbed body widening downward, pointed base. Light reddish-brown ware (5YR6/4), hard fired.

9.2.4. Cooking Pots

9.2.4.1. Persian Cooking Pots (Nos. 354–359)

The Persian pot is a form that is not related to the types of the previous period in style, manufacture technique or fabric. It represents the beginning of a new tradition, a prototype that developed through the remainder of the 1st millennium BC into the Roman period. Throughout the centuries the ware became thinner, leaner and better fired and the handle more thin strapped (Gitin 1990:236).

The typical Persian pot has a rounded body, a short wide and oblique neck, everted rim, flanged at lip, two rounded slightly raised handles and a round base. Throughout the development process the body was transformed from round to squat and sack shape. Stern (1973:103) divided them into three different types;

ours can be included in his second type (Type *Beth*), but there is probably one standard form with a numbers of variants.

The standard cooking pot seems to be of local manufacture since it appeared only in Persian Israel (Bennett and Blakely 1989:203). They were extremely common in the south and north of Israel during the 5th–4th century BCE. Parallels are known from Phoenician sites as well (Stern and Magen 1984:19).

In Jaffa, two types of pots were identified: *Low Neck* (354) that was dated in Sukas to the 6th–4th centuries BCE (Buhl 1983:27, fig. IX:94). *Flanged Rim* with higher neck (355–356) and lower neck (357–359). The first subtype was defined by Gitin as Type 154a (Gitin 1990:236–7, pl. 31:11–13) while the second was Type 154b (Gitin 1990:236–7, pl. 31:14–15). Both were dated to the 5th–4th centuries BCE. At Tel Mevorakh, they were the typical Persian pot common in the 5th century (Stern 1978:32, fig. 5:12, 14–16). Examination of the distribution pattern shows that the type was already popular as early as the late 6th century BCE. A few examples from Tell el-Ful indicate that it was manufactured as early as the late 6th–5th century (Lapp 1978:97, fig. 69:2–8 [Level IIIb, 587–538 BCE and Level IV, Hellenistic]). At Tel Keisan, it already appeared in Level 3b, which was dated to 580–450 BCE (Nodet 1980, pl. 21:9a). At Tel Qiri it was found in a Persian pit dated to the late 6th – early 5th centuries BCE (Avissar 1987:17, fig. 4:3).

At Tell el-Hesi, 64 examples of cooking pot rims were found in the stratified Persian period loci. Most of them came from Stratum Vd, which was dated to the mid-5th century BCE (Bennett and Blakely 1989:203, figs. 144:3–8; 145:7, 10; 168). In Jerusalem, eight pieces were recovered from a single deposit dated to the late 5th–4th centuries (Tushingham 1985:36, fig. 17.4–6, 8). Additional examples appeared in the City of David (Zuckerman 2012:39, fig. 3.4:10–13). At Tel Michal they appear throughout the Persian levels (Strata XI, IX, VIII) from 529 until 400 BCE and their development stages can be traced (Singer-Avitz 1989:116, figs. 9.1:3–4, 9.2:4).

The cooking pots with lids were quite rare prior to the Persian period but very common from the Hellenistic period onward (Rosenthal 1978:32, fig. 5:14–18).

Date range: late 6th – early 4th cents. BCE

354 Cooking pot

Reg. No. 79/Y/68/181; Area Y, Locus L–23, Bucket 224

Rim diam.: 18.5; Max h.: 3.6

Short and slightly concaved inside rim, neckless, rounded shoulder. Brown ware (7.5YR5/3) and core (7.5YR4/3), hard fired.

355 Cooking pot

Reg. No. A/71/B70; Area A, Sq. H3, Bucket 70

Rim diam.: 17; Max h.: 10

Everted flanged rim, flared high neck, globular body and base, two loop handles attached from rim to shoulder. Red ware (2.5YR5/6), many small black grits, medium fired.

356 Cooking pot

Reg. No. A/71/B349.3; Area A, Sq. I3, Bucket 349

Rim diam.: 20; Max h.: 6

Everted flanged rim, flared neck, globular body and base, two loop handles attached from rim to shoulder. Dusky red ware (2.5YR4/4), dark reddish-gray core (2.5YR4/1), many small black grits, hard fired.

357 Cooking pot

Reg. No. A/71/B349.2; Area A, Sq. I3, Bucket 349

Rim diam.: 16; Max h.: 6.5

Everted flanged rim, flared high neck, globular body and base, two loop handles attached from rim to shoulder. Dark reddish-brown ware (5YR2.5/2) and yellowish-red core (5YR4/6), a few small black grits, hard fired.

358 Cooking pot

Reg. No. A/70/B265.8; Area A, Sq. J3, Locus 510, Bucket 265

Rim diam.: 14.5; Max h.: 3

Everted flanged rim, flared high neck. Reddish-brown ware (5YR5/4), a few small white grits and many small black grits, hard fired.

359 Cooking pot

Reg. No. A/70/B265.3; Area A, Sq. J3, Locus 510, Bucket 265

Rim diam.: 14; Max h.: 3

Everted flanged rim, flared high neck. Weak red ware (2.YR6/4) and red core (2.5YR5/6), a few medium white grits and many minute black grits, medium fired.

9.2.4.2. Hellenistic Cooking Pots

The Hellenistic cooking pots are different from their predecessors. Their shape and profile has not changed dramatically but the fabric is of a much higher quality. The clay is well lavigated, the wall is thinner, the firing is harder and denser, and the clay has a metallic ring.

The typical pot has a long neck, very narrow in comparison with its globular body that tends to be more squat or bag-shaped. The neck is distinguished from the body by a sharp angle. The flanged rim of the Persian period tends to be less pronounced until it disappeared in the 1st century BCE. The rounded handles became tapered and thinner and an elbow-shaped strap in the 2nd century BCE.

In Jaffa, the following types were found.

Long Neck Type (Nos. 360–361)

Plain rim, very high vertical and narrow neck that seems disproportionate to the blown up body. Two handles with rounded section. The unusually high neck and the heavy handles are striking and can be an indication of an early date. At Tell el-Ful, similar pots were recovered from the 6th and 2nd century BCE levels (Lapp 1978:97, fig. 68:12–16, Levels III, IV; fig. 78:1–2). This type probably developed into the typical Hellenistic high-necked cooking pot. During the Hellenistic period the type appeared with a slightly flared rim in Samaria, Beth-Zur and Shechem dated to 200–100 BCE (Lapp 1961:185, Type 71.1c; Lapp and Lapp 1968:76–77, fig. 27:5, 7). At Caesarea, similar examples were found dated to the Hellenistic period (Gendelman 2007:25–26, fig. 2.1:3–6). At Gezer, the type appeared with a higher neck dated to the 2nd century BCE (Gitin 1990:258, pls. 34:7; 37:19).

In Jaffa, one complete pot (360) and a rim sherd (361) were found, which seem to have been of a post-Persian type in light of the coarse fabric and the thick wall of the pots.

Date range: 2nd cent. BCE

360 Cooking pot

Reg. No. 79/A/56/259; Area A, Sq. F.5

Rim diam.: 9; Max h.: 30.8

Thickened rim, high cylindrical neck, globular body, rounded base, two vertical loop handles attached from rim to shoulder. Weak red ware (2.5YR5/4), hard fired.

361 Cooking pot

Reg. No. 79/A/70/177; Area A, Sq. K3, Bucket 337

Rim diam.: 11; Max h.: 6

Plain rim, high neck. Light reddish-brown ware (5YR6/4) and yellowish-red core (5YR4/6), many small black grits, hard fired.

Thickened Rim (Nos. 362–367)

Rounded thickened rim, sometimes with a more triangular profile, high and slightly oblique neck, squatted body. The most dominant type in the 2nd half of the 3rd century BCE maintains the characteristic flanged rim of the Persian cooking pots.

At the mid-4th to the mid-3rd century levels in Dor, they comprised 25%–40% of the total number of cooking pots. At the 2nd century levels in Dor, the wall of the pots became thinner and they comprise 50% of the total cooking pots (Guz-Zilberstein 1995:299, fig. 6.18:1–11). At Samaria and Beth-Zur they were dated to the 2nd century BCE (Lapp 1961:184, Type 71.1b).

In Jaffa, the type is characterized by a more rounded rim rather than triangular profile, and has a thin wall, ribbed below the shoulder with a pronounced angle between shoulder and neck. Three complete pots were found in Area G (362–363, 365) and one in Sounding X (364). They are similar to the single complete pot that was recovered at Tell el-Ful at a mixed 2nd century layer dating until the 1st century BCE (Lapp 1978:104, fig. 78:16). At Tel Michal, similar pots appear in the Hellenistic refuse pit dated from the 4th to the late 2nd/early 1st century BCE (Fischer 1999:238, fig. 5.13:5–7).

A small complete pot (367) seems to be of a Hellenistic context, as the similar pots from Maresha (Levine 2003:94–5, fig. 6.6:72–5) and Yoqne‘am (Avisar 2005:51, fig. X.3:7) can confirm. The shape and handles suggest a Hellenistic dating (excluding the lack of ribbing) but a mid-5th century BCE example from Tel Mevorakh can point to the Late Persian period.

Date range: 2nd–1st cents. BCE

362 Cooking pot

Reg. No. 79/G/64/005; Area G, Sq. 28, Bucket 84

Rim diam.: 9.2; Max h.: 22.5

Thickened rim, high neck, rounded body and base, two handles attached from rim to shoulders. Reddish-brown ware (5YR5/3–4/3), hard fired.

363 Cooking pot

Reg. No. 79/G/64/004; Area G, Sq. 23, Bucket 20

Rim diam.: 8.8; Max h.: 17.5

Thickened rim, high neck, rounded body and base, two handles attached from rim to shoulders, ribbed body. Reddish-gray ware (5YR5/2), reddish-brown core (5YR5/4), hard fired.

364 Cooking pot

Reg. No. 79/X/60/001; Sounding X, Bucket 25

Rim diam.: 9.5; Base diam.: 2.4; Max h.: 15

Flaring thickened rim, short neck, rounded body with thin ribbing, curved base, two handles from rim to shoulders, ribbed shoulder. Dusky red ware (2.5YR4/4), medium fired.

365 Cooking pot

Reg. No. 79/G/64/003; Area G, Sq. 25, Bucket 89

Rim diam.: 9.5; Max h.: 19.6

Thickened rim, high neck, rounded body and base, two handles attached from rim to shoulders, ribbed body. Light reddish-brown ware (5YR6/4), hard fired.

366 Cooking pot

Reg. No. C/61/603; Area C, Sq. CC100, Locus 433, Bucket 632

Rim diam.: 12; Max h.: 6.5

Everted flanged rim, flared high neck, globular body, two loop handles attached from rim to shoulders. Weak red ware (2.5YR5/4), dark red core (2.5YR4/8), soft fired.

367 Cooking pot

Reg. No. 79/C/61/421; Area C, Sq. CC101, Bucket 636

Rim diam.: 8.6; Max h.: 12

Inverted rim, flared neck, globular body, grooved convex base, two vertical loop handles attached from rim to shoulders. Reddish-brown ware (5YR5/4) and yellowish-red core (5YR5/6), many small white grits, medium fired.

Flared Neck (Nos. 368–370)

This type is characterized by a high flaring neck, thin wall and bag-shaped body. The pronounced angle between shoulder and neck is sharper. The neck appears in both higher and lower version. This shape was one of the most popular types during the 2nd–1st century BCE. Its distribution pattern includes both Jewish and pagan sites in the south, north, and Coastal Plain areas of Israel. At Dor, it can be traced back to the 2nd half of the 4th century until the 2nd century BCE. The type comprises 8–20% of the total cooking pots at that site (Guz-Zilberstein 1995:298, fig. 6.17:1–7). The type was very common at Tel Keisan (Briend 1980:107, pl. 11:3a), Caesarea (Gendelman 2007, fig. 2.1:9–12), Ramat Hanadiv (Silberstein 2000:429, pl. V:11), and

in the refuse pit in Apollonia (Fischer 1999:238, fig. 5.13:8–9). At Gezer, it was one of the most popular types during the 2nd century (Gitin 1990:256, figs. 33:21, 37:14).

In the hinterland and mostly in Judea, the type was very popular and probably was locally manufactured. It appeared until the mid-1st century BCE at Tell el-Ful (Lapp 1978:104, fig. 78:1–10), Samaria (Crowfoot et al 1957:228, fig. 41:1–2), the Jewish Quarter of Jerusalem (Geva 2003:180, pls. 6.1:11; 6.2:20–24), The City of David in Jerusalem (Berlin 2012:19, fig. 2.4:6, 9), Machaerus (Loffreda 1996:71–2, fig. 27), and the Jericho cemetery (Killebrew 1999:117–8, fig. III.58:1–4). The Jaffa examples are identical to Type 2 in Jericho that had a simple rim and probably thinner wall and was defined as the “Hashmonean Cooking pot” and “Herodian Prototype.” They were dated from the 1st century BCE to the early 1st century CE and therefore must be the last variation of this type (Bar-Nathan 2002, pl. 12:140–149). Most of the Jaffa’s pots have a plain rim except for one (369) with inverted rim, which was dated at Tell el-Ful to 100–75 BCE (Lapp 1978:104, fig. 78:11) and in the Jewish Quarter of Jerusalem to the 1st century BCE (Geva and Rosenthal-Heginbottom 2003:180, pl. 6.5:39–40).

Date range: 2nd/1st cents. BCE to early 1st cent. CE

368 Cooking pot

Reg. No. 79/J/70/084; Area J, Bucket 44

Rim diam.: 9; Max h.: 9

Everted rim, high flared neck, globular body, two handles attached from rim to shoulder. Dark red ware (2.5YR4/6) and reddish-black core (2.5YT2.5/1), many small white grits, medium fired.

369 Cooking pot

Reg. No. A/70/B143.3; Area A, Sq. K3 K4, Bucket 143

Rim diam.: 10.4; Max h.: 5.7

Everted flanged rim, flared high neck, globular body, two loop handles attached from rim to shoulder. Reddish-brown ware (5YR5/3) and yellowish-red core (5YR4/6), a few small white grits, hard fired.

370 Cooking pot

Reg. No. 79/Y/68/326; Area Y, Bucket 35

Rim diam.: 14.4; Max h.: 6

Outcurved rim, flattened on top, low neck, globular body, two loop handles attached from rim to shoulder, ribbed body. Weak red (10R4/4), many small white grits, medium fired.

Gray Ware (Nos. 371–373)

A few cooking pots were made of hard fired dark fabric of unrecognized local origin. Their shape resembles the Hellenistic types with a high and flared neck.

A. Swollen Neck (Nos. 371–372)

Flattened rim, probably for receiving a lid device, high neck with a concave curvature on the interior. The neck is very narrow at bottom and distinguished from the body by a sharp angle. This type of pot is characteristic of the 2nd half of the Hellenistic period. The fabric is of a very dense and dark color, the wall is thin and with crowded ribs. The handles tend to be strapped rather than rounded. The single complete pot from Jaffa (371) is similar to Gezer Type 239, which is dated from the 2nd to the early 1st century BCE (Gitin 1990:257–8, figs. 37:15, 42:22). In Jerusalem, similar pots made of red ware and dated from the mid-2nd to the early 1st century BCE were found in the Jewish Quarter (Geva 2003:134, pls. 5.1:6, 27; 5.8:29, 34–35; 5.9:22) and the Armenian Garden (Tushingham 1985:39, fig. 18:27–29). More examples appeared at the 2nd century BCE level at Tell el-Ful (Lapp 1978:104, fig. 79:1–5), and in Beth-Zur (Lapp 1970:184–6, Type 71.1J).

B. Low Everted Rim (No. 373)

Lower neck sharply angular at junction with shoulder, everted rim. A few parallels were found at coastal sites such as Apollonia (Fischer 1999:238, fig. 5.13:5–7), Tel Michal (Fischer 1989:184, fig. 13.3:18–19) and

Shiqmona (Elgavish 1977:22, pl. III:16–17) dated from the Hellenistic period until the 1st century BCE.
Date range: 2nd–1st cents. BCE

371 Cooking pot

Reg. No. 79/T/62/053; Area T, Bucket 2

Rim diam.: 11.6; Max h.: 21.6

Flat vertical rim, concaved flaring neck, globular ribbed body, two small handles attached from rim to shoulder. Gray ware (5YR5/1) and dark reddish-brown core (5YR3/2), many minute white grits, hard fired.

372 Cooking pot

Reg. No. C/61/B705; Area C, Sq. CC100, Locus 433, Bucket 705

Rim diam.: 13.5; Max h.: 7.5

Flared rim and neck, two loop handles attached from rim to shoulder. Dark gray ware (5YR4/1) and dark reddish-brown core (5YR3/4), many quartz grits, hard fired.

373 Cooking pot

Reg. No. A/70/B281; Area A, Sq. L4, Bucket 281

Rim diam.: 17; Max h.: 6

Flattened rim, low neck, globular body, two loop handles attached from rim to shoulder. Dark reddish-gray ware (2.5YR4/1) and red core (2.5YR5/8), many small white grits, hard fired.

Concave Neck (Nos. 374–378)

Inturned rim, neck with concave interior. These pots are usually smaller than the high neck type and the body is more globular than squatted. The neck is wider and lower. The concaved neck, for receiving a lid device, is more common in casseroles. At Tel Keisan can be seen the development of the type from pot toward open casserole with a typical tunneled rim (Briend 1980:108–8, pl. 11, Types 5–6). The same development process existed with cooking pots manufactured in the Judean Desert that appeared in Machaerus in 30 BCE–72 CE (Loffreda 1996:78–9, fig. 32:1–19).

This type represents the 2nd half of the Hellenistic period and existed from the 2nd century BCE in a wide distribution range. The earlier examples dated from the 3rd to the 1st century BCE were found in Dor and comprised 10–30% of the total cooking pots. At the 125–60 BCE levels they were the majority of all cooking pots (Guz-Zilberstein 1995:299). Their popularity rose in the 2nd and mainly the 1st century BCE in Ashdod, Tel Michal and Jerusalem.

In Jaffa, all the characteristic variations of rim appear as defined by Briend according to the Keisan repertoire: No. 374 is similar to the first stage of development – Keisan Type 5a (Briend 1980:107–8, pl. 11:5a). This type is most common throughout the Coastal Plain during the 2nd–1st century BCE and appeared in Shiqmona (Elgavish 1977:22, pl. XV:117), Tel Michal (Fischer 1989:184, fig. 13.3:17), Apollonia (Tall 1999:238, fig. 5.13:5–7), Dor (Guz-Zilberstein 1995:299, fig. 6.19:7–9, 13–14), Ashdod (Dothan 1971:61, fig. 24:1, 8) and Caesarea (Berlin 1992:117, fig. 53:12). In central and southern Israel, the type appeared during the 2nd century BCE in Samaria (Crowfoot et al 1957, fig. 41:12), Beth-Zur (Lapp 1970:184, Type 71.1J), Tell el-Ful (Lapp 1978:104, fig. 79:1–5) and Jerusalem (Tushingham 1985:39, fig. 18:22–26; Geva and Rosenthal-Heginbottom 2003:133–4, fig. 5.10:21).

Pot no. 376 seems to be of the Tel Keisan Type 5b (Briend 1980:107–8, pl. 11:5b). At Beth-Shean and Akko it was dated to the Hellenistic period (Johnson 2006:531, fig. 15.3:46; Dothan 1976:31, fig. 30:13). At Machaerus, it appeared until the 1st century BCE/1st century CE (Loffreda 1996:78–9, fig. 32:5–6). Pot 377 represents the last stage – Tel Keisan Type 5d, before that form was turned into a casserole of Type 6 (Briend 1980:107–8, pl. 11:5d). A similar type appeared at Magdala (Fernandez 1983:123, 162:364, T11.4) dated to 75–250 CE. At Machaerus, the type was dated to the 1st century BCE/1st century CE (Loffreda 1996:78–9, fig. 32:18–19).

A small pot (378) was described in Jericho as a separate type that can be dated from the 1st century BCE to the early 1st century CE (Bar-Nathan 2002:72–3, pl. 12:151–2). A similar type was dated from the late 2nd to the 1st century BCE in Dor (Guz-Zilberstein 1995:299, fig. 6.19:10), Gezer (Gitin 1990:257–8, pl. 40:26), Maresha (Levine 2003:94–5, fig. 6.6:73) and Jason's Tomb in Jerusalem (Rahmani 1967:87, fig. 16:5).

Date range: 2nd cent. BCE to early 1st cent. CE

374 Cooking pot

Reg. No. 79/A/70/182; Area A, Sq. K3, Bucket 161

Rim diam.: 18; Max h.: 6

Incurved rim, concave neck, rounded shoulder, loop handle attached from rim to shoulder. Reddish-brown ware (5YR4/3), hard fired.

375 Cooking pot

Reg. No. C/65/629; Area C, Sq. CC102, Locus 449, Bucket 1011

Rim diam.: 7; Max h.: 3.5

Incurved rim, concave neck, rounded shoulder, loop handle attached from rim to shoulder. Weak red ware (2.5YR5/4) and red core (2.5YR5/8), many small white grits, medium fired.

376 Cooking pot

Reg. No. A/70/B117; Area A, Sq. J3, Locus 504, Bucket 117

Rim diam.: 11.5; Max h.: 4

Incurved rim, concave neck, rounded shoulder, two loop handles attached from rim to shoulder. Light reddish-brown ware (5YR6/4), a few medium white grits and many minute black grits, hard fired.

377 Cooking pot

Reg. No. 79/G/64/006; Area G, Sq. 23, Bucket 43

Rim diam.: 11.8; Max h.: 17

Tunneled rim with up-rised lip, low neck, globular body, two loop handles attached from rim to shoulder, ribbed body.

Reddish-brown ware (5YR5/3), hard fired.

378 Cooking pot

Reg. No. 79/J/70/083; Area J, Bucket 22

Rim diam.: 7.1; Max h.: 6.2

Incurved rim, concave neck, sloping shoulder, two loop handles attached from rim to shoulder. Very dark gray ware (7.5YR3/1), a few small and big white grits, hard fired.

9.2.4.3. Early Roman Cooking Pots

Flanged Rim (Judean Type) (Nos. 379–386)

High neck with flanged rim that varied from more beveled toward triangular section, globular ribbed body. The fabric is hard fired with spread ribs. This type of cooking pot was probably manufactured in the Judean area even though it was widely spread along the coast and in northern Israel. For example, as far away as Gamla, 240 rim fragments of various fabrics were counted, all with the identical flanged rim. Berlin noted that no scientific analysis has been made, but “by eyes and feel” many are similar to the “lime flecked red brown cooking ware produced at Binyanei ha-Uma in Jerusalem” (Berlin 2002:36–38, fig. 4; 2006:32, fig. 2.12:1–6). In Jaffa, the type was found mostly in Area C and a few in Area A. The Jaffa examples are probably also part of the Judean cooking ware industry.

The type is widespread in Early Roman Judean sites and appeared in large numbers in Jerusalem (Fernandez 1983:122, 160:348; Geva and Rosenthal-Heginbottom 2003:180, pls. 6.1:12; 6.2:26; 6.10:12), Machaerus (Loffreda 1996:75–76, fig. 29:1–26) and Masada (Bar-Nathan 2006, pl. 29:49–50). In the Jericho cemetery, the type was defined as the most common cooking pot from the late 1st century BCE to the mid-1st century CE (Killebrew 1999:119, fig. III.58:5–8). It existed during the 1st half of the 1st century CE in the Jericho palaces (Bar-Nathan 2002:171–2, pls. 26:478–483). A few examples were found in a burial cave in Jerusalem (Arnona) and others in the Cave of Letters where Yadin described the type as the most perfect example of the 2nd century CE cooking pots (Ben Arieh 1982:77, fig. 2:1; Yadin 1963:112, fig. 41). Some of the Herodium cooking pots are identical and dated to the 1st century CE (Bar-Nathan 1981:60, pls. 5:1, 4, 6; 9:10). Other examples were found in Ramat Hanadiv (Silberstein 2000:430–1, fig. 3, pl. V:8–9) and in a Herodian tomb in Geva (Siegelman 1988:35, pl. 20).

Date range: late 1st cent. BCE 2nd cent. CE

379 Cooking pot

Reg. No. C/61/604; Area C, Sq. DD101, Locus 434, Bucket 672

Rim diam.: 11.2; Max h.: 7

Flanged rim, high neck, globular ribbed body, two loop handles attached from rim to shoulder. Dark reddish-gray ware (5YR4/2) and dark reddish-brown core (5YR3/2), a few minute white grits, medium fired.

380 Cooking pot

Reg. No. C/65/643; Area C, Bucket 771

Rim diam.: 12; Max h.: 5.8

Flanged rim, high neck, globular ribbed body, two loop handles attached from rim to shoulder. Weak red ware (2.5YR5/4) and dark red core (2.5YR4/6), many minute black grits, hard fired.

381 Cooking pot

Reg. No. C/61/608; Area C, Sq. CC101, Bucket 646

Rim diam.: 11; Max h.: 6.4

Everted flanged rim, flared high neck, globular body, two loop handles attached from rim to shoulder. Weak red ware (2.5YR5/2) and red core (5YR5/6), many small white grits, medium fired.

382 Cooking pot

Reg. No. C/61/B642; Area C, Sq. DD101, Locus 429, Bucket 642

Rim diam.: 11; Max h.: 4.8

Everted flanged rim, flared high neck, globular body, two loop handles attached from rim to shoulder. Red ware (2.5YR5/6) and dark gray slip (7.5YR4/1), medium fired.

383 Cooking pot

Reg. No. C/61/B621; Area C, Sq. IV, Locus 432, Bucket 621

Rim diam.: 9.2; Max h.: 6

Flanged rim, high neck, globular ribbed body, two loop handles attached from rim to shoulder. Weak red ware (2.5YR5/4), many small black grits, hard fired.

384 Cooking pot

Reg. No. A/71/B280; Area A, Sq. I2, Bucket 280

Rim diam.: 10; Max h.: 5

Triangular rim, low neck, globular body, two loop handles attached from rim to shoulder, ribbed body. Red ware (2.5YR5/6), many small white and black grits, medium fired.

385 Cooking pot

Reg. No. C/65/B897.4; Area C, Sq. DD103, Locus 439, Bucket 897

Rim diam.: 10.6; Max h.: 2

Flanged rim. Red ware (2.5YR5/6), many small white and black grits, medium fired.

386 Cooking pot

Reg. No. 79/A/72/178; Area A, Sq., Locus 752, Bucket 451

Max h.: 14

Globular ribbed body and base. Yellowish-red ware (5YR5/8), many small black grits and a few quartz grits, hard fired.

Tunneled Rim (Nos. 387–392)

Everted rim creating a broad tunnel, rounded body.

In Jaffa, at the dwelling house in Area C, a large assemblage of tunneled rim casseroles was found. These pots are similar in form to those of the Kfar Hananya type widespread from the end of 1st century BCE to the mid-2nd century CE in the Galilee and Golan (Adan-Bayewitz 1993:111–119). The Jaffa examples seem identical to the Late Roman vessels known from Jalame, especially the type with the everted rim (360 fragments) dated to the mid-4th century CE (Johnson 1988:190–1, fig. 7–36:533–558). However, the northern ceramic products did not reach the Coastal Plain and the Judean Desert sites. The Jaffa examples were probably produced at another manufacturing center in the vicinity of Caesarea. The type appeared in large numbers in Caesarea during the Late Roman period (Riley 1975, nos. 113, 115; Oleson 1994:88, fig. 24:K30; Tomber 1999:309, fig. 2:50).

Date range: 2nd–4th cents. CE

387 Cooking pot

Reg. No. C/61/B265.1; Area C, Sq. DD102, Bucket 265

Rim diam.: 28; Max h.: 7.5

Diagonal tunneled rim, narrow shoulder, two loop handles attached to rim to wall. Reddish-brown ware (5YR5/4) and yellowish-red core (5YR5/6), many small white grits, hard fired.

388 Cooking pot

Reg. No. C/61/B671.1; Area C, Sq. DD101, Locus 429, Bucket 671

Rim diam.: 23; Max h.: 5

Diagonal tunneled rim, neckless, loop handle attached to rim. Brown ware (7.5YR5/4), many quartz and a few minute white grits, hard fired.

389 Cooking pot

Reg. No. C/61/B606; Area C, Sq. DD101, Locus 434, Bucket 606

Rim diam.: 13; Max h.: 4

Diagonal tunneled rim, neckless, loop handle attached to rim. Brown ware (7.5YR5/4), many minute white and black grits, medium fired.

390 Cooking pot

Reg. No. C/61/B281.1; Area C, Sq. DD102, Bucket 281

Rim diam.: 20; Max h.: 4.5

Diagonal tunneled rim, neckless. Red ware (2.5YR5/6), reddish-brown core (2.5YR3/1), a few minute white grits, medium fired.

391 Cooking pot

Reg. No. A/72/B344; Area A, Sq. I4, Locus 500A, Bucket 349

Rim diam.: 26; Max h.: 2.4

Flanged rim, raising upward with internal tunnel and ridged at junction with wall. Pink ware (7.5YR7/4), strong brown core (7.5YR4/6), many minute and small white grits, hard fired.

392 Cooking pot

Reg. No. C/61/B329.1; Area C, Sq. DD102, Bucket 329

Rim diam.: 21; Max h.: 2.5

Diagonal tunneled rim, neckless. Weak red ware (2.5YR5/4), medium fired.

Flattened Rim (Nos. 393–394)

Flattened rim, low and wide neck, two strap handles. The wall is very thin and the fabric very dense, hard fired with external ribbing below the shoulder. In Jaffa, two samples were found: the first, is made of fine thin ware (393) and the second made of a coarser and darker fabric (394). At Gezer, a similar type appeared at the mid-3rd century BCE level, even though the fabric and shape seem to be much later (Gitin 1990:258, fig. 32:21). At Yoqne'am, a single example appeared and was dated to the Early Roman period (Avisar 2005:51, fig. X.3:15). At Shiqmona, the type was found at the 2nd century CE level (Elgavish 1977:22, figs. III:14–15; XV:119–120) and in Caesarea it was dated even later, to the 3rd–4th century CE (Tomber 1999:309, fig. 2:37,40).

Date range: 1st–3rd cents. CE

393 Cooking pot

Reg. No. A/70/B102; Area A, Sq. J3, Bucket 102

Rim diam.: 13; Max h.: 7.8

Flattened rim, high neck, globular body, two strap handles attached to shoulder and rising above rim. Weak red ware (2.5YR5/3), many minute white and black grits, medium fired.

394 Cooking pot

Reg. No. C/61/618; Area C, Bucket 632

Rim diam.: 13; Max h.: 4.5

Plain rim, flared neck, globular body, two loop handles attached from rim to shoulder. Dusky red ware (2.5YR4/4) and dark red core (2.5YR4/8), hard fired.

“Herodian” Type (Nos. 395–399)

Plain rim, straight neck and globular ribbed body. The type developed from the typical previous flanged rim pot. The neck became lower and vertical, and the body became squatter and with a wide diameter on the upper part of the body. The fabric is of a very fine quality with a metallic ring. In the 1st century, the typical globular cooking pots are hard fired to a dark red color with crowded ribbing below the neck.

The type was nicknamed “Herodian” in connection with their distribution pattern in the Judean Desert and mainly at Jewish sites. They were produced from King Herod’s time until the 1st century CE. The Herodian type was the most common cooking pot in Masada (314 items) and comprises 8.2% of all the ceramic vessels and 74% of the cooking pots until the end of the 1st century CE (Bar-Nathan 2006, Type 1, 154–158, pls. 27–8:1–29). In the Jewish Quarter of Jerusalem it appeared until the end of the Second Temple period (Geva and Rosenthal-Heginbottom 2003:180). At Masada, the type was defined as the most common cooking pot during the mid and late 1st century CE (Bar-Nathan 2006:155–158, pls. 27:6–25). The type was used as well during the 1st century CE in Jericho (Killebrew 1999:119, fig. III.58:9; Bar-Nathan 2002:171, pl. 26:476–477), Herodium (Bar-Nathan 1981:60, pl. 5:2: 9:8) and Jerusalem (Geva and Hershkovitz 2006:114, pl. 4.13:16).

At the same time they were recovered at coastal sites, probably as a local imitation of the Judean types. In Jaffa, the early Herodian type appeared with a short neck (Bar-Nathan 2002:171, pl. 26:476–477). At Shiqmona, the type was described as unusual (Elgavish 1977:22, fig. XV:116).

Date range: late 1st cent. BCE to 1st cent. CE

395 Cooking pot

Reg. No. 79/T/62/010; Area T, Grave 18, Bucket 8

Rim diam.: 14; Max h.: 19

Outcurved rim, flattened and ridged on top, low neck, globular ribbed body, two loop handles attached from rim to shoulder. yellowish-red ware (5YR5/8), many minute black grits, hard fired.

396 Cooking pot

Reg. No. 79/G/64/016; Area G, Sq. 29, Bucket 76

Rim diam.: 12.2; Max h.: 4.4

Everted rim, flared neck, two handles attached from rim to shoulder, ribbed shoulder. Dusky red ware (2.5YR4/4), many small and a few big white grits, medium fired.

397 Cooking pot

Reg. No. A/73/B585; Area A, Locus 752, Bucket 585

Rim diam.: 12; Max h.: 5

Everted rim, flared neck, two handles attached from rim to shoulder, ribbed body. Red ware (2.5YR5/8) and dusky red core (2.5YR3/2), hard fired.

398 Cooking pot

Reg. No. C/61/B133.1; Area C, Sq. DD100, Locus 414, Bucket 133

Rim diam.: 11; Max h.: 8

Plain rim, straight neck, two handles attached from rim to ribbed shoulder. Dark red ware (2.5YR4/8), a few small white grits, medium fired.

399 Cooking pot

Reg. No. C/65/B923.1; Area C, Sq. CC103, Bucket 923

Rim diam.: 9.5; Max h.: 4.4

Outcurved rim, flattened on top, low neck, globular body, two loop handles attached from rim to shoulder. Dark red ware and core (2.5YR4/4), many minute black grits.

Grooved Rim (Nos. 400–403)

Ledged rim with one or two grooves, straight neck and ribbed body.

The type was probably developed from the former “Herodian Type” and was manufactured during the 2nd–3rd centuries CE throughout Israel. At northern sites, the type appeared in Jalame (Johnson 1988:196–7, fig. 7–40:601–605), and in Capernaum (Loffreda 1974:32–33, fig 2:1–2). At Horvat Hazon (Bahat 1974:167, figs. 4:1, 3, 7–9) the type was part of an assemblage connected to the arrival of the Sixth Legion Ferrate and was dated from the 2nd to the early 3rd century CE.⁵⁹

In Judea, and particularly at sites connected to the Bar Kochba Revolt in the Dead Sea, the type was very common. Examples were found in the Nahal Hever caves, (Aharoni 1964:158–9, fig.10:8–10), the Cave of the Letters (Yadin 1963, fig. 41), the Cave of Horror (Aharoni 1962:191–2, fig. 2:6–8) and ‘En Boqeq (Fischer and Tal 2000:34–35, fig. 2.4–2.5). At the Binyanei ha-Uma workshop in Jerusalem, similar examples were found dated from the 1st to the 3rd centuries CE (Magness 2005:91–2, 136, fig. 20:2). At Jericho, the type described as being of Galilean origin and was dated from the 2nd to the 3rd centuries CE (Bar-Nathan 2002:173, pl. 26:489–491).

The Jaffa examples seem like local coastal imitations of the Judean prototype. More examples were recovered in Ramat Hanadiv (Calderon 2000:93–95, pl. II:32–36) and in Caesarea (Bar-Nathan and Adato 1986:163–4, fig. 2:12; Tomber 1999:309, fig. 2:37–40) dated from the 2nd to the 3rd century CE.

Date range: 1st–3rd cents. CE

400 Cooking pot

Reg. No. C/61/B245.1; Area C, Sq. DD102, Bucket 245

Rim diam.: 12.5; Max h.: 4

Straight rim and neck with grooved lip. Brown ware (7.5YR5/4), reddish-yellow core (7.5YR6/6), and a few minute black grits, medium fired.

401 Cooking pot

Reg. No. C/61/B185.4; Area C, Sq. DD100, Locus 414, Bucket 185

Rim diam.: 14.5; Max h.: 3.5

Straight rim and neck with grooved lip, ribbed shoulder. Red ware (2.5YR5/6) and dusky red core (2.5YR4/2), many small white and black grits, medium fired.

402 Cooking pot

Reg. No. A/73/L752.5; Area A, Locus 752

Rim diam.: 11; Max h.: 4

Grooved rim, flared neck, ribbed shoulder. Yellowish-red ware (5YR5/6), dark reddish-gray core (2.5YR4/2), a few small white grits and few small quartz, hard fired.

403 Cooking pot

Reg. No. A/73/B622; Area A, Locus 752, Bucket 622

Rim diam.: 17; Max h.: 5

Thick rim with small groove at lip, flared neck, two handles attached from rim to the shoulder. Brown ware (7.5YR5/4) and reddish-brown core (5YR4/4), a few small black grits, hard fired.

Carinated Shoulder (Nos. 404–410)

Straight or more outcurved neck with deep carination on shoulders. As the previous subtypes, this type also developed at Judea.

Type A. The early version with less carinated shoulder (404–407) was in common use in Jerusalem (Magness 1993:217, form 2; Magness 2005:91–2, 136, fig. 22:1; Geva and Hershkovitz 2006:111, pl. 4.8:9–10), Machaerus and Masada from the end of the 1st century BCE up to the 2nd century CE (Loffreda 1996:81–82, fig. 34:1; Bar-Nathan 2006:167–168, pl. 31:69). Similar pots were discovered at the Roman dumps at Tel

⁵⁹ Bahat 1974:160–169, the ceramic assemblage was connected to the arrival of the Sixth Legion Ferrate during 115/116 CE to the Galilee.

Mevorakh (Rosenthal 1978:16, fig. 2:13) and in Ramat Hanadiv (Silberstein 2000:435, pl. VI:14–16), both dated to the Early Roman period. A single example was published by Kaplan dated to the mid-1st century CE (Kaplan 1964, fig. 4:9).

Date range: 1st–early 2nd cents. CE

Type B. The type with deep carinated shoulder (408–409) appeared in Herodium in a 1st century CE context (Bar-Nathan 1981:61, pl. 5:17–18). During the 2nd century the type was directly connected to the Bar Kochba Revolt sites and appeared in the Rock Cave (Eshel and Amit 1998:192, fig. 1:18) and at ‘En Boqeq (Fischer and Tal 2000:34–35, fig. 2.5:15). More examples like the former type, probably from local workshops, appeared in the sec^{2nd} century CE context in Dor (Guz-Zilberstein 1995, fig. 6.49:14) and Ramat Hanadiv (Calderon 2000:95, pl. II:41). At Glilot, 3rd–4th century examples were found (Calderon 201:69, fig. 6:12–16).

Date range: late 1st/2nd – 4th cents. CE

404 Cooking pot

Reg. No. C/61/614; Area C, Sq. DD101, Locus 429, Bucket 671

Rim diam.: 11.4; Max h.: 8.9

Diagonal tunneled rim, narrow shoulder, two loop handles attached from rim to wall. Dusky red ware (2.5YR4/4; 3/4), a few minute white grits and many minute black grits, medium fired.

405 Cooking pot

Reg. No. C/61/B671.2; Area C, Sq. DD101, Locus 429, Bucket 671

Rim diam.: 12; Max h.: 6

Diagonal tunneled rim, narrow shoulder, two loop handles attached from rim to wall. Red ware (2.5YR5/6), many minute white and black grits, hard fired.

406 Cooking pot

Reg. No. C/65/B1017; Area C, Sq. CC103, Bucket 1017

Rim diam.: 19.5; Max h.: 3

Diagonal tunneled rim, narrow shoulder, two loop handles attached from rim to wall. Reddish-brown ware (5YR4/4), a few small white grits, hard fired.

407 Cooking pot

Reg. No. A/73/B372.1; Area A, Locus 752, Bucket 372

Rim diam.: 14; Max h.: 8

Arched rim, sloping wall. Light reddish-brown ware (5YR6/4–3), a few small quartz grits, hard fired.

408 Cooking pot

Reg. No. A/73/B555.1; Area A, Locus 752, Bucket 555

Rim diam.: 12; Max h.: 4

Thickened rim, straight neck angled deeply at junction with shoulder and creating a tunnel. Red ware (2.5YR5/6) and dusky red core (2.5YR4/3), many minute quartz grits, hard fired.

409 Cooking pot

Reg. No. A/73/B576; Area A, Locus 752, Bucket 576

Rim diam.: 15; Max h.: 4.5

Flared rim and neck, slightly angled at junction with shoulder, two loop handles attached from rim to body. Yellowish-red ware (5YR5/6), many minute white grits and quartz grits, hard fired.

410 Cooking pot

Reg. No. A/73/B372.2; Area A, Locus 752, Bucket 372

Rim diam.: 8; Max h.: 6.5

Outfolded rim, straight neck and sloping shoulder, squatted body. Yellowish-red ware (5YR5/8–4/8), a few small white grits and many small black grits, medium fired.

9.2.4.4. Late Roman Cooking Pots

Hammerhead Rim (Nos. 411–412)

Broad rim flanged at both edges creating a pseudo hammer appearance. A few examples from Shiqmona (Elgavish 1977:22, figs. III:16–17; XV:121–122), Caesarea (Oleson 1994:38, fig. 8:K23; Bar-Nathan and Adato 1986:164, fig. 2:13) and Afula dated the type from the 1st to the 3rd century CE (Fernandez 1983:123, 161:360). At the Roman legionary kiln in Binyanei ha-Uma, Jerusalem, a similar cooking pot was found dated to the early/mid-3rd century CE (Magness 2005:138, fig. 20:3).

Date range: late 1st/2nd – 3rd cents. CE

411 Cooking pot

Reg. No. 79/T/62/012; Area T, Grave 18, Bucket 9

Rim diam.: 12; Max h.: 14

Flanged rim, short flared neck ridged at junction with sack-shaped body. Two loop handles attached from rim to shoulder. Reddish-brown ware (5YR4/3), hard fired.

412 Cooking pot

Reg. No. C/61/B185.3; Area C, Sq. DD100, Locus 414, Bucket 185

Rim diam.: 10; Max h.: 1.8

Flanged rim, short flared neck, ridged at junction with sack-shaped body. Red ware (2.5YR5/8), dusky red core (2.5YR3/4), many small white grits, hard fired.

Everted Rim Cauldron (nos. 413–416)

Broad shelf rim rising up obliquely, vertical ribbed wall. The type appeared during the 1st–2nd century CE in Shiqmona and Horvat Hazon (Elgavish 1976:36, fig. III:18; Fernandez 1983:123, 162:362). At the Roman legionary kiln in Binyanei ha-Uma, Jerusalem, similar handleless cooking pots were found that seem to be similar to the Roman Campanian cauldron dated from the 1st century BCE to the 3rd century CE (Magness 2005:94–5, fig. 25–27). At the same site a similar cooking pot was found in a post 70 CE context (Rosenthal-Heginbottom 2005:264, 265:138). In the Jewish Quarter of Jerusalem, the type was dated from the mid-2nd to the 1st century BCE (Geva and Rosenthal-Heginbottom 2003:181, pl. 6.2:27–280).

Date range: 1st cent. BCE to 3rd cent. CE

413 Cauldron

Reg. No. 79/G/64/017; Area G, Sq. 29, Bucket 78

Rim diam.: 25.5; Max h.: 9

Thick shelf rim, vertical ribbed body, two handles attached from rim to shoulder.

Red ware (2.5YR6/6) and dusky to dark red core (2.5YR4/8–4/3), many small and a few big white grits, many small black grits, hard fired.

414 Cauldron

Reg. No. A/73/B141; Area A, Locus 752, Bucket 141

Rim diam.: 25; Max h.: 7

Thick shelf rim, vertical ribbed body, two handles attached from rim to shoulder. Red ware (2.5YR5/6), many small white grits, hard fired.

415 Cauldron

Reg. No. C/61/B673.2; Area C, Sq. DD101, Locus 434, Bucket 673

Rim diam.: 12; Max h.: 3.7

Thick shelf rim, carinated bellow rim, vertical body. Red ware (2.5YR5/6) and dusky red core (2.5YR4/4), few minute black grits, hard fired.

416 Cauldron

Reg. No. C/61/B349.1; Area C, Sq. DD102, Bucket 349

Rim diam.: 21.5; Max h.: 3.5

Thick shelf rim rising up at lip, vertical body. Red ware (2.5YR5/6) and dusky red-weak red core (2.5YR4/2; 5/3). A few small white grits, hard fired.

9.2.5. Casseroles and Pans

Shallow and open cooking vessel with broad and pronounced rim for a lid, usually with two loop handles, either horizontal or vertical, attached from rim to shoulder. The first appearance of the casserole in the local repertoire was in the Hellenistic period as imitation of the Greek casserole that has a long tradition back to the 6th century (Thompson 1933:466; Sparks and Talcott 1970:227). Even though the casserole was a very dominant and useful cooking vessel for domestic Greek daily use, that form of cooking utensil entered the Levant kitchen not earlier than the Hellenistic period. Berlin's statement that the casserole appeared at pagan sites and rarely within the Hasmonean sphere or at a site with a large or exclusive Jewish population (Berlin 1997:95) was found to be incorrect. In Jaffa and at many Judean sites, the casseroles were very popular, probably due to Greek influence on the Hasmonean kitchen (Bar-Nathan 2006:151). The casseroles found in Jaffa were manufactured at a number of locations in Israel. The wide range of fabrics points to the wide contacts of the city with many manufacturing centers in accordance with the mixed character of the city.

The Hellenistic casserole was the first locally made imitation of the Greek prototype. It was suggested that the form developed or derived from the Athenian Hellenistic convex neck cooking pot (Kenyon 1957:230, fig. 41:8–11, 13–15) as described at Tel Keisan (Briend 1980:107–8, pl. 11:6). The casserole tradition began in Israel in the northern and coastal regions and was made of grainy fabric in red brick or orange red colors. The distribution pattern shows that it became the standard cooking pot in the first three centuries of the Roman Empire throughout the eastern Mediterranean. Their high popularity can be explained by a general awareness of Greek culinary habits or by the fact that the influence of the Greek or Graeco-Phoenician settlements on the local tradition was strong.

The Jaffa casserole repertoire is exceptionally large and diverse and can be seen as reflecting the inhabitant's ethnographic variety.

Pagan type: Globular Body Casseroles (Coastal Plain type).

Casserole with straight and steep sides.

Jewish type: Northern Casseroles.

Judean Casseroles.

9.2.5.1. Hellenistic and Early Roman Casseroles

Globular Body (Coastal Plain Type)

Shelf rim rising obliquely and concaved on top for a lid, deep body, concaved base, two loop handles attached from rim to shoulder or horizontal handles on the shoulder.

The first examples made of various fabrics originated outside Israel. Hayes identified the form in Knossos (Hayes 1983, fig. XXVIII) and in the House of Dionysus in Paphos (Hayes 1977:99, fig. 7:8) as "second century Aegean casseroles." At Anemurium, the type was characterized by the lack of handles (Williams 1989:62–3, figs. 32:361; 33:362). In the Athenian Agora, the type was dated from the 1st to the early 2nd century CE (Robinson 1959:42, pl. 7:G192). The facts suggest that the form was well known and made in many eastern Mediterranean production centers.

In Israel, local wares appeared in almost every Hellenistic and Early Roman assemblage. Their origin is still unknown, but their high popularity in the Coastal Plain can point to a local industry. In Jaffa, that type was the most common casserole that appeared in all excavated areas and can be divided into two subtypes.

A. Rounded Wall (Nos. 417–424)

Most examples displayed loop handles. One complete casserole was discovered in Area A (417) and a second in Sounding X (418). The earliest example appeared in Dor in the mid-4th century BCE but they reached their peak during the 2nd century BCE (6–25% of the total cooking pots) (Guz-Zilberstein 1995:299–300, fig.

6.20). During the Hellenistic period the type was common at other coastal sites such as Caesarea (Berlin 1992:117, fig. 53:13), Ramat Hanadiv (Silberstein 2000:435, pl. VI:7), Shiqmona (Elgavish 1977:23, pl. XVI:125), Apollonia (Fischer 1999:238, fig. 5.13:1) and Tel Mevorakh (Rosenthal 1978:16, fig. 2:11–12). In the hinterland, the type appears in Samaria and Mamphis (Crowfoot et al 1957:230, fig. 41: 8–11, 14; Negev 1986:123, nos. 21, 118–119, fig. 4:21). A few examples were found as far as the Jericho palaces (Bar-Nathan 2002:74–5, pl. 12:157–162).

Date range: mid-4th – 2nd cents. BCE

B. Carinated Wall (Nos. 425–428)

Flattened and horizontal shelf rim, angular body.

In Jaffa, it is less common. The tendency toward flattened rim and angular body is characteristic of the 2nd century BCE and also occurred during the Early Roman period. The fabric and shape are similar to those of other examples that were found in the Coastal Plain. At Dor, it became the dominant type in the 2nd century BCE (Guz-Zilberstein 1995:300, fig. 6.20:9). At Ramat Hanadiv and Tel Mevorakh, several examples occurred dated to the Early Roman period (Silberstein 2000:435, pl. vi:1–3; Stern 1978:15–16, fig. 2:6–10). A large number of fragments were recovered in Shiqmona dated probably to the 2nd century CE (Elgavish 1977:23, pl. XVI:126–7). The Capernaum example supports the opinion that the type flourished during the Early Roman period (63 BCE–135 CE) and disappeared toward the end of the 2nd century CE (Loffreda 1974:41–42, 157, fig. 6:8–14).

Date range: 2nd cent. BCE – 2nd cent. CE

417 Casserole

Reg. No. 79/A/72/179; Area A, Sq. J101, Locus 755, Bucket 579

Rim diam.: 20; Max h.: 9

Diagonal shelf rim, concaved on top, deep globular body and base, two loop handles attached from rim to body. Reddish-brown ware (5YR5/4), a few small white grits, hard fired.

418 Casserole

Reg. No. 79/X/60/014; Sounding X, Bucket 42

Rim diam.: 22.3; Max h.: 8

Diagonal shelf rim, concaved on top, deep globular body and base, two loop handles attached from rim to body. Reddish-brown ware (5YR4/4), many medium white grits, hard fired.

419 Casserole

Reg. No. C/65/641; Area C, Bucket 824

Rim diam.: 20; Max h.: 5.5

Diagonal shelf rim, concaved on top, deep globular body and base, two loop handles attached from rim to body. Reddish-brown ware (5YR5/3, 4/4), many small white grits, medium fired.

420 Casserole

Reg. No. A/71/B288; Area A, Sq. I2, Bucket 288

Rim diam.: 22; Max h.: 5.8

Diagonal shelf rim, concaved on top, deep globular body and base, two loop handles attached from rim to body. Red ware (2.5YR5/6), dusky red core (2.5YR4/4), many small black grits, medium fired.

421 Casserole

Reg. No. C/61/610; Area C, Sq. CC101, Bucket 646

Rim diam.: 19; Max h.: 5

Diagonal shelf rim, concaved on top, deep globular body and base, two loop handles attached from rim to body. Reddish-brown ware (5YR4/4) and dark gray core (5YR4/1), many small white grits, medium fired.

422 Casserole

Reg. No. C/61/609; Area C, Sq. CC100, Locus 433, Bucket 602

Rim diam.: 19; Max h.: 4.6

Shelf rim, concaved on top, deep carinated body, two loop handles attached from rim to body. Reddish-gray ware (5YR5/2), dark reddish-brown core (5YR3/3), a few minute white grits, hard fired.

423 Casserole

Reg. No. A/70/B255.1; Area A, Bucket 255

Rim diam.: 25.5; Max h.: 6.4

Shelf rim, concaved on top, deep carinated body, two loop handles attached from rim to body. Dusky red ware (2.5YR4/2, 4/4), many minute white grits, medium fired.

424 Casserole

Reg. No. A/70/B192.1; Area A, Sq. J3, Bucket 192

Rim diam.: 16; Max h.: 3

Diagonal shelf rim, concaved on top. Reddish-brown ware (5YR5/4) and very dark gray core (5YR3/1), hard fired.

425 Casserole

Reg. No. C/61/B592.1; Area C, Sq. DD102, Locus 432, Bucket 592

Rim diam.: 18; Max h.: 4.2

Shelf rim, concaved on top, deep carinated body. Reddish-brown ware (5YR5/4) and dusky red core (2.5YR4/4), many minute white and black grits, hard fired.

426 Casserole

Reg. No. A/70/B169.2; Area A, Sq. K3, Bucket 169

Rim diam.: 26; Max h.: 3.6

Shelf rim, concaved on top, deep carinated body, two loop handles attached from rim to body. Dark red-ware (2.5YR4/8) and dark reddish-gray core (2.5YR4/1), a few minute white grits, hard fired.

427 Casserole

Reg. No. A/70/B101; Area A, Sq. K3, Bucket 101

Rim diam.: 26; Max h.: 6

Shelf rim, concaved on top, deep carinated body, two loop handles attached from rim to body. Weak red ware (2.5YR5/4), many minute black grits, medium fired.

428 Casserole

Reg. No. A/70/B181; Area A, Sq. K3, Bucket 181

Rim diam.: 24; Max h.: 3

Diagonal shelf rim, concaved on top. Light reddish-brown ware (5YR6/4) and reddish-brown core (5YR4/4), a few minute white grits, hard fired.

Steep Walls (Nos. 429–434)

Shelf rim, angled upward with internal ridge creating concaved top for receiving a lid. The wall is steep and angular at junction with a flattened, slightly convex base.

The Jaffa examples included relatively small size casseroles (433–434) and many larger pieces (429–432). The type is known as a locally made vessel throughout Israel and appeared at other eastern Mediterranean sites such as Paphos (Hayes 1991, fig. XXXIII:5), Corinth, Delos, Syria, Knossos, Stobi in Yugoslavia and Pompeii in Italy (Berlin 1997:98, with full references).

In Israel, the type appeared at Late Hellenistic levels dated from the 2nd to the early 1st century BCE. The earlier appearance occurred in Samaria in the late 3rd century BCE (Crowfoot et al 1957:228, fig. 41:18). They are quite common in Ashdod in a refuse pit and in Area A dated to 150–100 BCE (Dothan 1967:24, fig. 2:6–9; 1971:175–6, fig. 99:10). At Tel Anafa, 120 fragments were recovered from late 2nd century context (125–75 BCE) (Berlin 1997:97–8, pl. 28:234–239). The small size examples (433–434) were identified in Dor as Type 7 that appeared as early as the 3rd century and continued in small numbers until the late 2nd century BCE (Guz-Zilberstein 1995:300, fig. 6.21:10–13). The large casseroles are classified separately as Type 8 and dated in Dor mostly to the 2nd century but also to the late 3rd century BCE (Guz-Zilberstein 1995:300, fig. 6.22:1–5). Further examples appeared in Beth-Shean (Johnson 2006:531, fig. 15.3:52).

Date range: late 3rd–2nd early 1st cents. BCE

429 Casserole

Reg. No. A/72/B114.4; Area A, Sq. K4, Bucket 114

Rim diam.: 28; Max h.: 7.2

Shelf rim, angled upward with internal ridge creating concaved top, steep wall carinated sharply at lower part. Reddish-brown ware (5YR5/4), many minute white grits, hard fired.

430 Casserole

Reg. No. C/65/630; Area C, Sq. CC102, Locus 449, Bucket 1007

Rim diam.: 26; Max h.: 7

Shelf rim, angled upward with internal ridge creating concaved top, steep wall carinated sharply at lower part. Reddish-brown ware (5YR5/4–5/3), many small white grits, hard fired.

431 Casserole

Reg. No. A/72/B33.1; Area A, Sq. L4 K4, Bucket 33

Rim diam.: 28; Max h.: 4

Shelf rim, angled upward with internal ridge creating concaved top, steep wall carinated sharply at lower part. Very dusky red ware (2.5YR2.5/2) and dusky red core (2.5YR4/3), many minute white and black grits, medium fired.

432 Casserole

Reg. No. A/70/B255.3; Area A, Sq. L3, Bucket 255

Rim diam.: 31; Max h.: 4

Flanged rim, raising upward with internal tunnel and ridged at junction with vertical wall. Red ware (10R4/8) and very dark gray core (5YR3/1), many small black grits, medium fired.

433 Casserole

Reg. No. 79/H/64/017; Area H, Sq. 1, Locus 401, Bucket 11

Rim diam.: 16.5; Max h.: 3.5

Shelf rim, angled upward with internal ridge creating concaved top, steep wall carinated sharply at lower part, rounded base. Weak red ware (2.5YR5/3), hard fired.

434 Casserole

Reg. No. 79/J/70/086; Area J, Bucket 22

Rim diam.: 16.2; Max h.: 4.6

Shelf rim, angled upward with internal ridge creating concaved top, steep wall carinated sharply at lower part. Dusky red ware (2.5YR4/3) and red core (2.5YR5/6), a few small white and black grits, medium fired.

Infolded Lip (Nos. 435–437)

Very broad shelf rim with infolded lip, steep slightly concaved wall, sometimes with internal ribbing.

In Jaffa, several fragments were found, two of them made of fine well lavigated ware (435–436) and the third of dark gritty ware (437). According to the Tel Anafa example, this type was manufactured in the environs of Akko and was the most common type at the site; 348 fragments were recovered dating to the 1st quarter of 1st century BCE (Berlin 1997:101, pl. 30:259–265). The type appeared at many Huleh Valley sites as well as in Banias and Egypt (Berlin 1997:101).

Date range: Early Roman

435 Casserole

Reg. No. A/70/B169.1; Area A, Sq. K3, Bucket 169

Rim diam.: 20; Max h.: 3

Very broad shelf rim with infolded lip, steep slightly concaved wall. Dark red ware (2.5YR4/6), a few small white grits and quartz, medium fired.

436 Casserole

Reg. No. C/65/628; Area C, Sq. CC102, Bucket 993

Rim diam.: 38.5; Max h.: 1.5

Very broad shelf rim with infolded lip. Weak red ware (2.5YR6/4) and dark red core (2.5YR4/6), many minute black grits and quartz grits, medium fired.

437 Casserole

Reg. No. 79/A/70/180; Area A, Sq. L3, Bucket 246

Rim diam.: 27; Max h.: 5

Very broad shelf rim with infolded lip, steep ribbed wall narrowing down. Weak red ware (2.5YR5/2) and brown core (7.5YR4/3), many medium white grits, medium fired.

Shelf Rim (Nos. 438–442)

Broad projected rim rising obliquely, flattened on upper face with ridge at inner end. The wall is sharply carinated below the rim and slopes downward. Two handles are attached from rim to below the carination.

In Jaffa, a relatively large number of rim fragments were found, solely in Area A. The type was found sporadically in 2nd century CE contexts in Caesarea (Berlin 1992:117, fig. 53:15). Two unclassified small rim fragments with the typical ridge on the inner face were found in Ramat Hanadiv and dated from the late 1st century BCE to the early 1st century CE (Calderon 2000:95, pl. III:52).

Date range: late 1st cent. BCE – 2nd cent. CE

438 Casserole

Reg. No. A/70/B174.1; Area A, Sq. K3, Bucket 174

Rim diam.: 39; Max h.: 3.5

Shelf rim rising up at outer end, ridged and carinated sharply at inner end, at junction with sloping wall. Red ware (10R5/6), many small white and black grits, hard fired.

439 Casserole

Reg. No. A/70/B153.1; Area A, Sq. K4, Bucket 153

Rim diam.: 25; Max h.: 4.2

Shelf rim rising up at outer end, ridged and carinated sharply at inner end, at junction with sloping wall. Two loop handles attached from rim to below carinated wall. Dusky red ware (2.5YR4/4), many minute white and black grits, medium fired.

440 Casserole

Reg. No. A/70/B40; Area A, Sq. K3, Locus 501, Bucket 40

Rim diam.: 32; Max h.: 3.2

Shelf rim rising up at outer end, ridged and carinated sharply at inner end, at junction with sloping wall. Two loop handles attached from rim to below carinated wall. Reddish-brown ware (5YR4/3) and yellowish-red core (2.5YR4/6), many small white and black grits, hard fired.

441 Casserole

Reg. No. A/70/B144.3; Area A, Bucket 144

Rim diam.: 32; Max h.: 4

Shelf rim rising up at outer end, ridged and carinated sharply at inner end, at junction with sloping wall. Two loop handles attached from rim to below carinated wall. Red ware (2.5YR5/8) and dark red core (2.5YR4/8), many quartz, hard fired.

442 Casserole

Reg. No. A/72/B23; Area A, Sq. L3 K3, Bucket 23

Rim diam.: 24; Max h.: 3.5

Shelf rim rising up at outer end, ridged and carinated sharply at inner end, at junction with sloping wall. Two loop handles attached from rim to below carinated wall. Weak red ware (2.5YR5/4) and red core (2.5YR5/6), many minute white black and quartz grits, medium fired.

Flanged Rim (Nos. 443–445)

A few examples in Jaffa cannot be attributed with confidence to one of the above types. They can be compared to the Jericho Type 1b casseroles dated to the 1st century BCE (Bar-Nathan 2002:73–4, pl.12:157–162). However, in Samaria, the type had already appeared in the 2nd century BCE (Crowfoot et al 1957:229, fig. 41:19; 235, fig. 43:15). The type was probably locally made, and was in use in Benghazi during the 2nd century CE (Riley 1979:348, fig. 127:932–934).

Date range: 1st cent. BCE – 2nd cent. CE

443 Casserole

Reg. No. A/70/B143.2; Area A, Sq. K3–K4, Bucket 143

Rim diam.: 23; Max h.: 6

Flanged diagonal rim, rounded wall. Pink ware (5YR7/4) and dark gray core (5YR4/1), a few minute black grits, hard fired.

444 Casserole

Reg. No. 79/A/70/139; Area A, Sq. J3, Bucket 60

Rim diam.: 16; Max h.: 4.5

Everted rim with internal lug, carinated wall. Reddish-brown ware (5YR5/4), many small black grits, medium fired.

445 Casserole

Reg. No. C/61/606; Area C, Sq. CC100, Locus 433, Bucket 633

Rim diam.: 16.5; Max h.: 3.5

Flanged diagonal rim, vertical wall. Weak red ware (2.5YR5/4) and dark red core (2.5YR4/8), a few minute quartz grits, medium fired.

Galilean Type: Globular Body (Kfar Hananya Cooking Ware) (Nos. 446–451)

Flattened shelf rim, sometimes rising up obliquely, globular body and base.

The fabric is characteristic of the Galilean workshops that adapted the globular casserole type. The Galilean ware appeared throughout Israel in a high and widespread distribution due to its manufacturing at more than one location. During the Hellenistic period it was manufactured in Akko and in the Huleh Valley (Berlin 1997:95) and from the Early Roman period until the 5th century CE in Kfar Hanania in the Galilee and at Gamla in the Golan (Adan-Bayewitz 1993; Berlin 2006). The Kfar Hanania ceramic industry was established during the mid-1st century BCE and controlled the trade and pottery production in the Jewish settlements in the Galilee and Golan during the period of the Mishna and Talmud. The Galilean ware was found at 23 sites in Israel, of which 19 are in the Lower Galilee and the Golan (Adan-Bayewitz 1993; Berlin 1997:102 with full references). The Galilean adaptation of the “pagan casserole” for Jewish culinary purposes is a unique precedent.⁶⁰

The globular casserole was the first type that was manufactured at the Kfar Hanania center and was classified as Type 3a, dated from the mid-1st century BCE to the mid-2nd century CE (Adan-Bayewitz 1993:111–119, fig 3a). Type 3a can be determined as the first ceramic vessel that was traded throughout the Galilee and the Golan. Similarly shaped casseroles were also made in Gamla from the mid-1st century BCE until 67 CE (Berlin 2006:17, 41 fig. 2.16:7–14).

In Jaffa, a few examples of the Type 3a casserole were found in the Jewish dwelling house in Area C (446–451). The Galilean examples appear mainly in northern Israel while a small quantity reached the coastal sites such as Ramat Hanadiv (Silberstein 2000:435, pl. vi:7–8), Shiqmona (Elgavish 1976:64, fig. XVI:130–134) as well as Jaffa.

In Judea, where the local casserole was dominant and popular, the type appeared in small numbers. For example, in Jericho and Machaerus a few pieces were found that were not treated as a Galilean type of casserole. However, the shape seems to be of the Kfar Hanania industry (Bar-Nathan 2002:73, pl. 12:153). At Machaerus, three samples were found (Loffreda 1996:81–82, fig. 34:3–6).

Date range: mid-1st cent. BCE to mid-2nd cent. CE

446 Casserole

Reg. No. C/61/623.1; Area C, Sq. CC100, Locus 433, Bucket 623

Rim diam.: 24; Max h.: 8

Arched rim, wide neck and rounded wall. Reddish-brown ware (5YR5/4), many minute white and quartz grits, hard fired.

⁶⁰ The opinion was supported by the fact that similar deep body casseroles appear in small numbers at Jericho Palaces dated to the 1st century BCE (Bar-Nathan 2002:73–74, pl. 12:153–162).

447 Cooking pot

Reg. No. C/61/B623; Area C, Sq. CC100, Locus 433, Bucket 623

Rim diam.: 7.5; Max h.: 14

Arched rim, wide neck and rounded wall. Reddish-brown ware (5YR5/4), many minute white and quartz grits, hard fired.

448 Casserole

Reg. No. C/61/B617.1; Area C, Sq. CC100, Locus 433, Bucket 617

Rim diam.: 17; Max h.: 4

Shelf rim, wide neck and rounded wall. Dark reddish-gray ware (5YR4/2), many minute white grits, hard fired.

449 Casserole

Reg. No. 79/J/70/085; Area J, Bucket 20

Rim diam.: 20.2; Max h.: 4.7

Everted flattened rim, rounded wall. Dark gray ware (5YR4/1), reddish-gray core (5YR5/2), many small quartz grits, medium fired.

450 Cooking pot

Reg. No. /61/B630; Area C, Sq. CC100, Locus 433, Bucket 630

Rim diam.: 15; Max h.: 5.5

Everted rim, rounded wall. Reddish-brown ware (5YR5/4), many minute white and quartz grits, medium fired.

451 Cooking pot

Reg. No. C/61/B617.6; Area C, Sq. CC100, Locus 433, Bucket 617

Rim diam.: 14; Max h.: 3

Everted rim, rounded wall. Reddish-brown ware (5YR5/4), many minute white and quartz grits, hard fired.

Judean Casserole (Nos. 452–462)

The Judean casseroles are characterized by a dominant neck that is clearly lacking in the other Hellenistic vessels in which the distinguished broad rim was preferred for receiving lids. The morphological development of the Judean casserole is probably connected to its function in the cooking process. References in the Mishna help to identify the casserole as the *kdera*, which served for cooking solids and liquids (Nedarim 6:1–2). Many of the foods required constant stirring so the vessel was left uncovered in order not to boil over (Bar-Nathan 2002:68). The traditional way of cooking can explain the absence of lids and the morphological shape of the plain rim with high neck slightly wider than that of the typical Hellenistic cooking pot.

A. Angular Wall (Nos. 452–459)

Steep rim grooved or cut obliquely on upper lip, sharply carinated shoulder sometimes with external ridge. The wall is carinated at junction with the probably rounded base. Two loop handles attached from rim to below carination.

In Jaffa, many fragments were found with several rim and wall variations. The type was found in the Judean region and other sites with Jewish inhabitants. Examples dated to the 1st century CE were found in Caesarea (Johnson 2008b:70, nos. 797–807), Herodium and Machaerus (Bar-Nathan, 1981:61, pl. 5:21–22; Loffreda 1996:125–6, fig. 56:130). At Masada, the type was dated to the 2nd half of the 1st century CE (Bar-Nathan 2006:166, pl. 30:58).

Date range: 1st cent. CE

B. Carinated Shoulder (Nos. 460–462)

Plain rim, high steep and slightly flared neck, sharply carinated shoulder, rounded wall. According to Kahane, the type can be considered the Jewish kettle. Its shape was derived from a Syrian, Greek or Italian metal prototype imitated in clay with no link to earlier local pottery (Kahane 1952:130–1, pl.1:e).

This type was the most common Early Roman casserole in the Judean region. However, in Jaffa it is rather uncommon and appears in small numbers. The Jaffa examples are of two variations or subtypes.

The first with relatively average neck and squat wide shoulder (460).

The second with higher neck and sloping shoulder (461–462).

The type was very common in the Jerusalem tombs of the Second Temple period (Killebrew 1999:119, fig. III.59:7–8 – with full references) and at settlements around Jerusalem (Berlin 1997:93 – with full references). Its first appearance occurred not before the early 1st century BCE, according to evidence from the Jewish Quarter of Jerusalem (Geva and Rosenthal-Heginbottom 2003:180, figs. 6.2:30; 6.5:43; 6.9:20), Jason's Tomb (Rahmani 1967: 87, fig. 16:7–8) and the Armenian Garden (Tushingham 1985, fig. 24:17–18). At Jericho and Masada the type was considered the most common cooking vessel during the late 1st century BCE and throughout the 1st century CE. The type continued to be manufactured in small quantities in the early 2nd century CE (Bar-Nathan 2002:75, fig. 13:164–165; 175, fig. 27:495–499; Bar-Nathan 2006:164–5, pl. 30:51–3; Killebrew 1999:119, fig. III.59:7–8). At Herodium, in the 1st half of the 1st century CE context, the two subtypes were recovered (Bar-Nathan 1981:61, pl. 5:12–16). The type was rarely found at Northern Israel. A single fragment at Tel Anafa was dated to the early 1st century CE (Berlin 1997:93, pl. 27:227) and a few others were defined in Gamla as Judean ware (Berlin 2006:41, fig. 2.16:15–17). Along the Coastal Plain, some fragments were recovered from an Early Roman context in Ramat Hanadiv, all of them belonging to the higher neck subtype (Silberstein 2000:435, pl. VI:10–11).

Date range: 1st cent. BCE to 1st cent. CE

452 Casserole

Reg. No. 79/J/70/081; Area J, Bucket 38

Rim diam.: 26; Max h.: 5.8

Steep rim grooved on top, low neck with sharp ledge at junction with carinated wall, two loop handles attached from rim to carinated wall. Dusky red ware (2.5YR4/3) and red core (2.5YR5/6), a few medium white and a few small black grits, medium fired.

453 Casserole

Reg. No. 79/J/70/075; Area J, Bucket 36

Rim diam.: 23.6; Max h.: 7.4

Steep rim grooved on top, low neck with sharp ledge at junction with carinated wall. Dusky red ware (2.5YR3/2) and dark red core (2.5YR4/6), many small white and black grits, medium fired.

454 Casserole

Reg. No. A/70/B105; Area A, Sq. K3, Bucket 105

Rim diam.: 24; Max h.: 5.2

Steep rim grooved on top, low neck with sharp ledge at junction with carinated wall, two loop handles attached from rim to carinated wall. Weak red ware (2.5YR5/4) and dusky red core (2.5YR5/8, 2.5YR3/3), a few small quartz grits, medium fired.

455 Casserole

Reg. No. 79/A/70/181; Area A, Sqs. J3–K3, Bucket 150

Rim diam.: 28.5; Max h.: 6.5

Steep rim grooved on top, low neck with sharp ledge at junction with carinated wall, two loop handles attached from rim to carinated wall. Weak red ware (2.5YR5/3) and dark red core (2.5YR4/8), many minute grits, medium

456 Casserole

Reg. No. C/61/B325.2; Area C, Sq. DD102, Bucket 325

Rim diam.: 31.5; Max h.: 4

Steep rim with flat top, straight wall. Reddish-brown ware (5YR5/4) and reddish-gray core (5YR5/2), many small white grits, hard fired.

457 Casserole

Reg. No. C/61/B325.1; Area C, Sq. DD102, Bucket 325

Rim diam.: 25; Max h.: 4

Concaved rim, tunned on top. Rounded wall. Weak red ware (2.5YR5/4) and reddish-brown core (2.5YR3/1), few small white grits, medium fired.

458 Casserole

Reg. No. C/61/B209.1; Area C, Sq. DD100, Locus 414, Bucket 209

Rim diam.: 27; Max h.: 4.5

Everted rim with flat top, rounded wall. Red ware (2.5YR5/6), medium fired.

459 Casserole

Reg. No. C/61/B671.3; Area C, Sq. DD101, Locus 429, Bucket 671

Rim diam.: 15; Max h.: 2.8

Everted rim, rounded wall. Dusky red ware (2.5YR4/4), dusky red core (2.5YR3/4), medium fired.

460 Casserole

Reg. No. A/70/B349.3; Area A, Sq. L4, Bucket 349

Rim diam.: 22; Max h.: 4.5

Plain rim, low neck carinated sharply at junction with shoulder, two loop handles attached from rim to shoulder. Dark red ware (2.5YR4/6), many minute white grits, medium fired.

461 Casserole

Reg. No. C/61/602; Area C, Sq. CC101, Bucket 693

Rim diam.: 21; Max h.: 7

Plain rim, high flared neck carinated at junction with shoulder, two loop handles attached from rim to shoulder. Weak red/dusky red ware (2.5YR6/4–4/4), many small black grits, medium fired.

462 Casserole

Reg. No. A/70/B248.3; Area A, Sq. L3, Bucket 248

Rim diam.: 20; Max h.: 8

Plain rim, high flared neck carinated at junction with shoulder, two loop handles attached from rim to shoulder. Dusky red ware (2.5YR4/4) and dark red core (2.5YR4/8), many minute quartz grits, medium fired.

Imported Casseroles or Lopas (Nos. 463–466)

The original Greek function of the lopus was for cooking fish, which were first braised then stewed in their sauce. At Athens, 585 lopus and 480 chytrai (the classical cooking pot) were found (Rotroff 2006:178–9).

A. Rounded Sides (Nos. 463–464)

Ledge rim, sometime concaved on upper face to receive a lid, semi-globular body.

In Jaffa, the type was relatively uncommon.

The classical Greek type continued to be made from the late 5th until the early 3rd century BCE (Rotroff 2006:179–180, fig. 82:636–640). Its local imitation was manufactured in the northern and coastal regions of Israel.

However, the two examples from Jaffa are made of fine ware and have horizontal handles that were very familiar in the Greek Hellenistic prototype and were probably made outside Israel. The first example (464) was dated in Athens from the late 5th century to 275 BCE (Rotroff 2006:179, pl. 82:636–638). The second example (463) was dated to the early 3rd century BCE (Rotroff 2006:179, pl. 82:639–640). The type also appeared during the 2nd century BCE in Corinth (Edwards 1975, pl. 29:670–671). At Dor, the type was classified among the local globular casseroles dated to the 3rd century BCE (Guz-Zilberstein 1995:300, fig. 6.20:1, 14–15). Other examples dated to 3rd–2nd century BCE were found in Yoqne‘am (Avisar 1996:54, fig. X.4:3), Samaria (Crowfoot et al 1957:230, fig. 41: 9–10) and Tel Keisan (Briend 1980, pl. 11:8).

A similar example appeared at the Roman legionary kiln site in Binyanei ha-Uma dated to post-70 CE (Rosenthal-Heginbottom 2005:261, 268, no. 158).

Date range: late 4th–2nd cents. BCE

B. Straight Sides (Nos. 465–466)

Broad flattened rim rising obliquely and flattened on upper face, rounded wall and two horizontal handles below rim. The fine levigated fabric seems to be of imported origin. At Athens, the type was dated from 220

BCE until Roman times (Rotroff 2006:183, pl. 84:663–668). In Jaffa, two examples were found in Area C. A single parallel was found in the Hellenistic refuse pit in Apollonia (Fischer and Tal 1999:238, fig. 5.13:4).
Date range: 2nd cent. BCE

463 Casserole

Reg. No. 79/Y/64/112; Area Y, Sq. 3, Locus 605, Bucket 39

Rim diam.: 19; Max h.: 4.4

Diagonal shelf rim, concaved on top, deep globular body and base, two horizontal handles attached on shoulder. Dark red ware (2.5YR4/6), many small white grits, hard fired.

464 Casserole

Reg. No. 79/Y/68/322; Area Y, Sq. X12, Locus L–2, Bucket 13

Rim diam.: 22.5; Max h.: 4.2

Flanged diagonal rim, vertical wall, two horizontal handles attached on shoulder. Weak red ware (2.5YR6/4; 5/3), many minute black grits, a few small silver mica grits, hard fired.

465 Casserole

Reg. No. C/65/627; Area C, Sq. CC102, Bucket 954

Rim diam.: 24.5; Max h.: 3.2

Flanged diagonal rim, vertical wall, two horizontal handles attached on shoulder. Red ware (2.5YR5/8), many small gold mica grits, hard fired.

466 Casserole

Reg. No. C/61/B349.3; Area C, Sq. DD102, Bucket 349

Rim diam.: 25.5; Max h.: 3.5

Flanged diagonal rim, vertical wall. Red ware (2.5YR5/6), dusky red core (2.5YR4/4), many small black grits, many small gold mica grits, hard fired.

Heavy Casseroles (Nos. 467–473)

In Area C, a large assemblage of cooking bowls was found, which seems uncommon in the repertoire throughout Israel. Similar examples appeared as locally made cooking ware in the Jerusalem vicinity. According to context, they can be dated to the Early Roman period. They can be divided into two subtypes.

A. Shelf Rim/Pans (Nos. 467–469)

Thick and narrow shelf rim, straight wall with sharp carination at junction with floor. Two horizontal handles below rim. A similar rim fragment was found in the Jewish Quarter of Jerusalem and dated to the early 1st century BCE (Geva and Rosenthal-Heginbottom 2003:197, fig. 6.6:2). At Binyanei ha-Uma, the type was defined as a pan and dated from the mid-1st century BCE to 70 CE (Berlin 2005:50, fig. 19:5).

Date range: 1st cent. BCE

B. Thick Flattened Rim (Nos. 470–473)

Thick flattened rim, obliquely cut and beveled inward. The lip recalls that of the Roman and Byzantine casserole type (see below). Straight wall, carinated sharply at junction with floor. Two horizontal handles below rim. According to the parallels, the type can be a later development of the former subtype. The examples from the 1st century CE had not been created in the local workshops in Binyanei ha-Uma and the Armenian Garden (Berlin 2005:50, fig. 19:4; Tushingham 1985, fig. 22:24–25).

Date range: 1st cent. CE

467 Casserole

Reg. No. C/61/B191.1; Area C, Sq. DD100, Locus 414, Bucket 191

Rim diam.: 26; Max h.: 5

Thick flattened rim, carinated wall, two horizontal handles attached on wall. Reddish-brown ware (5YR5/4) and core (5YR4/3), many small white grits, hard fired.

468 Casserole

Reg. No. C/61/B513.3; Area C, Sq. CC101, Locus 422, Bucket 513

Rim diam.: 23; Max h.: 3.2

Thick flattened rim, carinated wall. Reddish-brown ware (5YR5/4), many minute white and black grits, hard fired.

469 Casserole

Reg. No. C/61/B287.2; Area C, Sq. DD102, Bucket 287

Rim diam.: 24; Max h.: 4.2

Thick flattened rim, carinated wall. Reddish-brown ware (5YR5/3), a few minute quartz grits, hard fired.

470 Casserole

Reg. No. C/61/B324.5; Area C, Sq. DD102, Locus 417, Bucket 324

Rim diam.: 23; Max h.: 4

Thick incurved rim, rounded wall. Reddish-brown ware (5YR5/4) and very dark gray core (5YR3/1), a few red grits, few quartz grits, medium fired.

471 Casserole

Reg. No. C/61/230.3; Area C, Sq. DD102, Bucket 230

Rim diam.: 23.5; Max h.: 3.5

Thick incurved rim, flattened on top, straight wall. Dark gray ware (5YR4/1), a few small white grits, medium fired.

472 Casserole

Reg. No. C/61/B178.3; Area C, Sq. DD100, Locus 414, Bucket 178

Rim diam.: 21.5; Max h.: 4

Thick incurved rim, flattened on top, straight wall carinated at junction with sloping lower part.

Reddish-brown ware (5YR5/4), many small white grits, a few quartz grits, medium fired.

473 Casserole

Reg. No. C/61/B204; Area C, Sq. DD100, Locus 414, Bucket 204

Rim diam.: 22.5; Max h.: 4.5

Thick incurved rim, flattened on top, straight wall carinated at junction with sloping lower part. Two horizontal handles on wall. Reddish-brown ware (5YR5/4), dark gray core (5YR4/1), a few white grits, hard fired.

Hooked Rim (Nos. 474–475)

Flat hooked rim. Straight wall. Two rim fragments were recovered in Area C dated to the Early Roman period. No parallels were found.

474 Casserole

Reg. No. C/65/B899.3; Area C, Sq. CC103, Bucket 899

Rim diam.: 24.2; Max h.: 4.5

Flat rim, straight wall. Yellowish-red ware (5YR5/6) and dark gray core (5YR4/1), many quartz grits, hard fired.

475 Casserole

Reg. No. C/61/B671.4; Area C, Sq. DD101, Locus 429, Bucket 671

Rim diam.: 26; Max h.: 4.4

Flat rim, straight wall, carinated at mid part. Yellowish-red ware (5YR5/6) and dark gray core (5YR4/1), many quartz grits, hard fired.

9.2.5.2. Late Roman and Byzantine Casseroles

Obliquely cut rim, sloping wall with crowded ribs. Two horizontal handles, twisted and pulled upward, attached below rim and usually raising above it. Following recent research conducted in Jerusalem and its vicinity (Magness 1993:211–214) and the publication of the temple podium finds from Caesarea (Magness

1992b:132–133), scholars reached the opinion that it is extremely difficult to determine the chronological development of the plain casserole (Kingsley 1999:282, fig. 9:1, 3–4; Calderon 2000:140). The casserole did not receive intensive study and was treated as a uniform Late Roman to Umayyad type without any specific determination about its typological-chronological development. According to this investigation of sites throughout Israel, the casserole can be divided into three subtypes.

Carinated Wall (Nos. 476–482)

Obliquely cut rim with angular beveled inward lip. Wall sharply carinated at junction with sloping floor. The fabric is thin with dense ribbing. It appeared during the Early Roman period and continued to be manufactured in various fabrics in many regional centers until the 6th–7th centuries CE. In Jaffa, many examples were found in the dwelling house in Area C. The type was well represented at Judean sites during the 1st century CE, like in Jericho (Killebrew 1999:119, 122, fig. iii.59:12), Machaerus (Loffreda 1996:83–84, fig. 35:1–8) and Masada (Bar-Nathan 2006:172, pl. 31:80–83). It also appeared along the Coastal Plain during the 3rd–4th century, in Caesarea (Bar-Nathan and Adato 1986:164, fig. 2:17–18; Tomber 1999:300, fig. 3:55–58; Magness 1992b, fig.60:1–3; Riley 1975, Type 1a) and Ramat Hanadiv (Silberstein 2000:437, pl. VII:3). Two examples from Jaffa seem slightly unclassified (481–482). They are made of semi-fine ware and ribbed on their internal and external face. Similar examples were found in Caesarea and dated to the 3rd–4th century CE (Bar-Nathan 1986:164, fig. 2:17–18).

Date range: 1st–4th cents. CE

476 Casserole

Reg. No. C/61/B130.2; Area C, Sq. DD100, Locus 414, Bucket 130

Rim diam.: 23; Max h.: 6

Diagonally cut rim, straight wall slightly concaved and carinated at junction with lower part, two horizontal handles below rim. Weak red and red ware (2.5YR5/2; 5/8), a few large white grits and many small black grits, hard fired.

477 Casserole

Reg. No. C/65/642; Area C, Bucket 818

Rim diam.: 21.5; Max h.: 4.5

Diagonally cut rim, sloping ribbed wall, two horizontal handles attached to below rim. Weak red ware (2.5YR5/4) and red core (2.5YR5/6), many small white and black grits, hard fired.

478 Casserole

Reg. No. C/61/B300.2; Area C, Sq. DD102, Bucket 300

Rim diam.: 25; Max h.: 5

Diagonally cut rim, flared wall, two horizontal handles below rim. Weak red ware (5YR5/4), many minute white grits, hard fired.

479 Casserole

Reg. No. C/61/B183.1; Area C, Sq. DD100, Locus 414, Bucket 183

Rim diam.: 26; Max h.: 7.5

Diagonally cut rim, flared wall carinated at junction with lower part. Weak red ware (2.5YR5/4), many quartz small grits, hard fired.

480 Casserole

Reg. No. C/61/B324.9; Area C, Sq. DD102, Locus 417, Bucket 324

Rim diam.: 35.5; Max h.: 8.5

Diagonally cut rim, flared wall carinated at junction with lower part, two horizontal handles below rim. Yellowish-red ware (5YR5/6), small and large white grits, medium fired.

481 Casserole

Reg. No. C/61/B152.1; Area C, Sq. DD100, Locus 414, Bucket 152

Rim diam.: 22.5; Max h.: 7.5

Diagonally cut rim, straight ribbed wall carinated at junction with lower part. Red ware (2.5YR5/6), many small and medium white grits, many small black grits, hard fired.

482 Casserole

Reg. No. A/73/B572; Area A, Locus 752, Bucket 572

Rim diam.: 19; Max h.: 5.3

Diagonally cut rim, straight ribbed wall carinated at junction with lower part, two horizontal handles below rim. Yellowish-red ware (5YR5/8; 4/6), many medium and large white grits, many quartz grits, hard fired.

Sloping Wall (Nos. 483–485)

Obliquely cut rim, flared wall. The fabric continued to be thin with a “metallic ring.” This variation is characterized by a wide distribution range throughout a relatively long period of time. The earlier examples appeared in southern Israel during the 1st century CE, in Machaerus (Loffreda 1996:83–4, fig. 35:1–7), and continued to appear in the 2nd century in Memphis (Negev et al. 1977:113–117, fig. 8:57). In the Jerusalem corpus the type was dated from the late 3rd/early 4th to the 8th/9th centuries CE (Magness 1993:211–212). At Beth She‘arim and Khirbet Ibreiktas the type appeared at the 3rd to early 4th century levels (Avigad 1955, fig. 3:14; Kletter and Raphano 1998:46–7, fig. 2:8). At Shiqmona, an example appeared in the 2nd century pit (Elgavish 1976:38, fig. IV:20). At Caesarea, similar fragments were dated to the 4th century CE (Tomber 1999:311, fig. 3:57–59) or later (Magness 1992b:132–3, fig. 60:1–3; 147, fig. 64:6–8). The type was defined in the Caesarea hippodrome as the commonest cooking vessel form represented by 27% of the total cooking ware at the Byzantine level (Riley 1975:35, Nos. 25–28). It appeared also in the Roman Promontory Palace (Bar-Nathan and Adato 1986:164, fig. 2:15). At Jalame, 610 fragments were recovered, which make it the most popular type of casserole at the site during the mid-4th century CE (Johnson 1988:200, fig. 7–43:630–634). At Ramat Hanadiv, the type is very common in the Byzantine villa dated to the 6th–7th centuries CE (Calderon 2000:140, pl. VIII:44–45).

Date range: 2nd–6th cents. CE

483 Casserole

Reg. No. 79/J/70/082; Area J, Bucket 6

Rim diam.: 26; Max h.: 4.3

Diagonally cut rim, sloping ribbed wall, two horizontal handles attached below rim. Dusky red ware (2.5YR4/2; 4/3), a few small and big grits, medium fired.

484 Casserole

Reg. No. C/61/B81.2; Area C, Bucket 81

Rim diam.: 22.5; Max h.: 4

Diagonally cut rim, sloping wall, two horizontal handles attached below rim. Reddish-brown ware (5YR5/4), many quartz small grits, hard fired.

485 Casserole

Reg. No. C/65/632; Area C, Sq. DD103, Bucket 1045

Rim diam.: 24.5; Max h.: 3.5

Diagonally cut rim, sloping ribbed wall, two horizontal handles attached below rim. Weak red ware (2.5YR5/4), many small black grits, hard fired.

Rounded Wall (No. 486)

More rounded wall and flattened lip rather than angular.

Ben-Arieh notes that in Hamat Gader the casserole, which was recovered under the Late Roman and Early Byzantine floor, is characterized by a carinated wall while the Late Byzantine and Umayyad type was deeper with rounded walls (Ben-Arieh 1997:371, fig. III:26–34). A single fragment of the later shape with a more rounded wall and a cut flattened rim was recovered in Jaffa. The subtype was well known throughout Israel during the Byzantine period and survived until the Islamic period in Jerusalem and its vicinity (Magness 1993:214, form 3). Along the Coastal Plain, the type appeared in Caesarea (Tomber 1999:311, fig. 3:60–61), Ramat Hanadiv (Calderon 2000:108, pl. VIII:39; 140, pl. XXIII:47–8), in the Jewish village of Sumaqa (Kingsley 1999:282, fig. 9:1,3–4), in the south in Ramat Rahel (Aharoni 1964, fig. 8:1–7), and in the north in Jalame (Johnson 1988:200, fig. 7–43:635), Shavei Zion (Prausnitz 1967:44, fig. 5) and Hammat Gader

(Ben-Arieh 1997:351, fig. III:26–29). The fabrics are varied, which is evidence of regional production centers.

Date range: 4th–7th cents. CE

486 Casserole

Reg. No. A/70/B153.2; Area A Square:K4, Bucket 153

Rim diam.: 24; Max h.: 12

Cut flattened rim, rounded and deep ribbed wall, two horizontal handles attached below rim. Dusky red-ware (2.5YR4/4), many small white grits, a few minute quartz grits, hard fired.

Shallow Wall (Nos. 487–488)

In Area C, a few fragments of shallow walled cooking bowls were found in Late Roman and Byzantine contexts (Startun 1). No parallels were found.

487 Casserole

Reg. No. C/61/B81.1; Area C, Bucket 81

Rim diam.: 22.5; Max h.: 4

Cut rim, flared wall, ribbed on lower part. Dark red ware (2.5YR4/8), many small white and black grits, hard fired.

488 Casserole

Reg. No. C/61/B27.1; Area C, Sq. DD101, Bucket 27

Rim diam.: 22.5; Max h.: 3

Flattened rim, flared wall, ribbed on lower part. Reddish-brown ware (5YR5/4) and gray core (5YR2.5/1), hard fired.

9.2.5.3. Hellenistic and Early Roman Pans

Low open vessel. Low flaring wall, broad floor usually smoothed and polished sometimes with only one handle. The pans were very common throughout the eastern Mediterranean and Italy during the Hellenistic and Early Roman periods and were introduced into the western provinces such as North Africa only during the 2nd century CE (Riley 1979:254). Unlike the Levantine globular cooking pots and casseroles that were used for boiling soups and stews, the Hellenistic pans with the flat bottom were suitable for the preparation of a *patina*, a kind of Roman quiche (Magness 2005; Berlin 1993:43–44). In Jaffa as well as in other coastal sites, various pan types were found that were typical of pagan eating habits. It is most surprising to reveal that those imported cooking vessels, especially the “Pompeian Red Ware,” penetrated deeply into the Jewish community and appeared in large quantities at many sites in Jerusalem and its vicinity. The presence of those types in the Jaffa repertoire is evidence for the mixed character of the site during Hellenistic and Roman times.

Frying Pans (Micaceous Ware) (Nos. 489–490)

Plain flaring rim and wall, sometimes slightly concaved on the outer face and sharply carinated at junction with wide floor. The bottom is flattened or concaved toward the center and is characterized by neat circular wheel-burnished lines on floor. The fabric is fine and micaceous, and was sometimes smoothed with knife parings on the external face. Micaceous ware was very common at Hellenistic eastern Mediterranean sites. A thin section analysis at Tel Anafa identified the ware as being derived from a volcanic source. The area around Pergamon was suggested as the production center, according to the distribution pattern and laboratory results (Berlin 1997:110, note 241). A thin section of a fragment from Benghazi points to an Aegean origin (Riley 1979:256–7, fig. 102:476). The type appeared in small quantities at many eastern Mediterranean sites during the Late Hellenistic period, probably due to their use for specific needs and not for everyday cooking. The function of the dish is still uncertain, probably for frying meat (Riley 1979:256; Silberstein 1995:300), or to dry out seeds or legumes (Berlin 1997:110).

In Jaffa, two fragments of uniform shape were found. The first has a low flaring wall (489) and the second a higher wall (490). Both are with gold and silver mica. At Dor the type was recovered from loci dated to 325–275 BCE. Only one fragment was found in each loci (Guz-Zilberstein 1995:300, fig. 6.23a:3–4). At Tel Anafa, the type was an extremely common dish, and 63 fragments were recovered from the Late Hellenistic levels (Berlin 1997:111, pl. 34:PW298–301). The many other examples are typical of Hellenistic sites along the Coastal Plain or in the hinterland. None of them were found within the Hashmonean kingdom, probably due to Jewish religious prohibitions.

Date range: 3rd–1st cent. BCE

489 Pan

Reg. No. 79/A/56/214; Area A

Rim diam.: 27.5; Base diam.: 23.5; Max h.: 3.2

Rounded rim, low oblique wall, flat and wide base, neat circular wheel-burnished lines on floor. Dusky red ware (2.5YR4/2) and reddish-black core (2.5YR2.5/2), many medium white and a few large black grits, few red grits, few medium gold mica and many small silver mica grits. Hard fired.

490 Pan

Reg. No. X/61/B41.1; Sounding X, Bucket 41

Base diam.: 14; Max h.: 1.5

Rounded rim, low oblique wall, flat and wide base, neat circular wheel-burnished lines on floor. Very dark gray ware (7.5YR3/1), many small gold mica grits, many small black grits, hard fired.

Hellenistic Baking Pans (Nos. 491–493)

Thickened rim, coarse flared and low wall, flattened bottom. Blackened and ashy on the inside and outside as a result of baking over an open fire. The fabric lacks the micaceous inclusion due to manufacture at a different production center.

In Jaffa, the following subtypes were found.

A. Handled Type (Nos. 491–492)

Smaller pan with one loop handle that rises from one side of rim to the other.

Served as the former type for baking and probably was used for baking “pita bread” according to its flattened broad floor (Guz-Zilberstein 1995:300).

Parallels from Israel occurred in 2nd–1st century BCE contexts in Ashdod (Dothan 1971:61, fig. 24:6) and Dor (Guz-Zilberstein 1995:300, fig. 6.23a:11–15). At Tel Anafa was founded a similar baking pan with a coiled handle that probably served for the same function (Berlin 1997:112, pl. 34:PW303).

Date range: 2nd–1st cents. BCE

B. Thumb Decoration (No. 493)

Flared rim and wall with thumb pressed decoration on lip. Blackened and ashy on internal wall. In Jaffa, only a single rim fragment was found in Area C. However, the type was common in Dor during the 2nd half of the 3rd century and in the early 2nd century BCE (Silberstein 1995:300, fig. 6.23:9–10). Outside Israel, similar decorated pans were found in Benghazi and dated to the Early Roman period (Riley 1979:254–5, fig. 101:473).

491 Pan

Reg. No. C/61/B603; Area C, Sq. CC100, Locus 433, Bucket 603

Base diam.: 33; Max h.: 5.5

Plain rounded rim, flared wall and wide flat base, two rising handles attached to rim. Brown ware (7.5YR5/3) and strong brown core (7.5YR5/6), many small white grits, hard fired.

492 Pan

Reg. No. C/61/B617.3; Area C, Sq. CC100, Locus 433, Bucket 617

Rim diam.: 22; Max h.: 3

Plain rounded rim, flared wall and wide flat base. Brown ware (7.5YR5/4) and red core (2.5YR5/8), many minute white grits, hard fired.

493 Pan

Reg. No. C/61/B500; Area C, Sq. CC100 Locus.; Bucket 500

Rim diam.: 30; Max h.: 4.5

Flared rim, decorated on external face with thumbbed pattern, flared wall. Dark gray ware (5YR4/1), a few quartz grits, hard fired.

Early Roman Pompeian Pans

The Pompeian red ware industry was known from the 3rd century BCE in central and northern Italy. However, in the eastern Mediterranean it flourished especially during the Early Roman period. This type of pan had an internal wall with thick and smooth non-stick red slip resembling the common red tint of wall painting in Pompeii. The type was manufactured in Southern Italy in the Bay of Naples until the eruption of Mount Vesuvius in 79 CE (Peacock 1977). Various assumptions were raised by scholars concerning their function. Berlin noted that the flat bottom pan was used for baking flat cakes of bread as attested by examples from Pompeii (Berlin 1993:39). As we know, flat bread was part of the Roman soldiers ration, so it is not surprising to find the Pompeian red ware pans in legionary camps in the provinces (Magnes 2005:87).

For unknown reasons, only a few sherds of the Pompeian original ware were recovered in Jaffa. However, the lack of Pompeian red ware pans may be due to the unsatisfactory excavation of Roman occupational phases.

A. Pompeian Red Ware (No. 494)

Plain rim, convex wall and wide flat base. In Jaffa, a single fragment of a base was found, although the type was very popular at Coastal Plain sites in Israel and even reached the Judean markets, especially during the Herodian 2 period in Jericho (15BCE/6CE) (Bar-Nathan 2002:138) and until 66/74 CE in Masada (Bar-Nathan 2006, pl. 73:1–1–4,6). However, throughout the Coastal Plain sites such as Dor (Guz-Zilberstein 1995:322, 403, fig. 6.49:3, 6–8) Shiqmona (Elgavish 1977, pl. 18:137), Ramat Hanadiv (Silberstein 2000:436–7, pl. VII:9) and Caesarea (Bar-Nathan and Adato 1986:164, fig. 2:20; Riley 1975:45–46, no. 90) we can find the type until the 2nd century CE.

Date range: late 1st cent. BCE – 2nd cent. CE

B. Heavy Coarse Wall (Nos. 495–497)

Heavy coarse low wall flared and terminating with thick rim. The wall is burnished on its internal face and unslipped. Two examples from Jaffa seem as if they were made of the same fabric. Similar pans have been identified in Masada (Bar-Nathan 2006:363, pl. 73:12) as the Pompeian red ware type that was manufactured in Belgium (Fabric 6) according to its fabric (Peacock 1977:156–158, fig. 3:14). The type is dated from the 2nd to the mid-3rd century and can be connected to the presence of the Tenth Legion in Masada as well as in Jaffa.

However, it is very surprising to find a similar complete pan in Akko in a context dated to the end of the 1st century BCE (Dothan 1976:44, fig. 45:9).

Date range: 2nd cent. BCE – 3rd cent. CE

C. Local Imitation of Pompeian Red Ware (Nos. 498–499)

Imitations of the type were found at Judean sites. A large assemblage in Binyanei ha-Uma was published, dated to the 2nd–3rd centuries CE, probably in connection with the Tenth Legion camp, located at that spot (Berlin 2005:87–90, figs. 17:4–7; 18, 19:1–4). In Jaffa two bowls made of coarse ware were found in the dwelling house in Area C. Both seem to be the identical and were probably used by the native inhabitants

under the influence of the Roman Tenth Legion soldiers in Jaffa. More examples made of Micaceous ware were found in the Jewish Quarter of Jerusalem (Geva Rosenthal-Heginbottom 2003:197, fig. 6.6:1). They can be expected only at Judean or sites connected to the Roman military presence at Israel.

Date range: 2nd–3rd cents. CE

494 Pan

Reg. No. C/65/B920.7; Area C, Sq. CC102, Bucket 920

Flat base. Dusky red ware (2.5YR4/2), dark red slip (2.5YR4/4), hard fired.

495 Pan

Reg. No. 79/A/70/187; Area A, Sq. L4, Bucket 318

Rim diam.: 29.5; Base diam.: 23.5; Max h.: 3.8

Thickened grooved inside rim, flared and concaved on outer face wall, flat and wide base. Internal thick brown slip, burnished on external wall. Dusky red ware (2.5YR4/2) and reddish-brown core (2.5YR3/1), many small white grits, hard fired.

496 Pan

Reg. No. C/61/B218.3; Area C, Sq. DD100, Locus 414, Bucket 218

Rim diam.: 27; Max h.: 4

Thickened rim, flared and concaved on outer face wall, flat and wide base. Weak red ware (2.5YR5/3) and core (2.5YR5/2).

497 Pan

Reg. No. A/72/B31.2; Area A, Sq. k3 l3, Locus 703, Bucket 31

Rim diam.: 40; Max h.: 3.5

Thickened grooved inside rim, flared and concaved on outer wall and burnished on external wall.

Brown ware (7.5YR5/4) and dark gray wash (7.5YR4/1), many big white and gray grits, a few medium quartz grits.

498 Casserole

Reg. No. C/61/B185.1; Area C, Sq. DD100, Locus 414, Bucket 185

Rim diam.: 30.5; Max h.: 3.5

Pointed incurved rim, rounded wall, flat and wide base. Reddish-brown ware (5YR5/4), yellowish-red core (5YR4/6), hard fired.

499 Pan

Reg. No. C/61/B703.2; Area C, Sq. DD102, Bucket 703

Rim diam.: 30; Max h.: 4.5

Plain incurved rim, rounded wall. Reddish-brown ware (5YR5/4), yellowish-red core (5YR4/6), hard fired.

9.2.5.4. Late Roman and Byzantine Pans

Flattened Rim Frying Pans (Nos. 500–503)

Thick inverted rim, shallow wall and one broad handle with two or three ridges at upper face and irregular hole at the end. The fabric is course, hard fired with an exterior ashy appearance. It seems to be imported, since similar pan was found at Benghazi and dated to the 2nd–3rd centuries CE (Riley 1979:266, fig. 105.528). At Shiqmona and Caesarea harbor similar pans were dated to the same period (Elgavish 1977:9–10, pl. IV:23; Oleson 1994:37, fig. 8:K16) and may be evidence for the distribution of this type along the Coastal Plain.

Date range: 2nd–3rd cents. CE

500 Pan

Reg. No. 79/C/61/410; Area C, Sq. DD101, Bucket 302

Rim diam.: 30.5; Max h.: 2.6

Broad flattened rim, long horizontal handle with three ridges on top and large suspension-hole at one end, wavy pattern along the handle. Red ware (2.5YR5/6), many small white and black grits, hard fired.

501 Pan

Reg. No. 79/A/73/169; Area A, Locus 752, Bucket 152

Rim diam.: 31; Max h.: 2.5

Broad flattened rim, long horizontal handle with three ridges on top and large suspension-hole at one end. Brown ware (7.5YR4/3), many small white grits, hard fired.

502 Pan

Reg. No. 79/C/61/409; Area C, Bucket 76

Rim diam.: 23; Max h.: 2.8

Broad flattened rim, long horizontal handle with three ridges on top and large suspension-hole at one end, wavy pattern along the handle. Weak red ware (2.5YR5/4) and dusky red core (2.5YR4/2), many small white grits, medium fired.

503 Pan

Reg. No. 79/G/64/072; Area G, Sq. 29, Bucket 80

Rim diam.: 26.5; Max h.: 2.6

Broad flattened rim. Red ware (2.5YR5/8), many small white and black grits, medium fired.

Inverted Rim (No. 504)

Sharp inverted rim, sloping ribbed wall with spout for pouring liquid. Opposite the spout is one long handle. The fabric is coarse and ribbed on external face.

The Jaffa fragment preserved only the rim and wall with remains of red slip on the external face.

The type is relatively rare in Israel. Calderon mentions one unpublished parallel from Shiqmona (Calderon 2000:143). More examples occurred in small quantities in Ramat Hanadiv dated to the 5th–6th centuries CE (Calderon 2000:110, pl. VIII:49; 143, pl. XXIII:59). The Eretz-Israel Museum displays a complete example from Caesarea that was defined as *marheshet* – the Mishnaic pan used for frying in deep oil (Zevulun and Olenik 1979:37). Calderon suggested according to parallels from the northern Coastal Plain and petrographic analysis, that the origin of the pan was in the vicinity of Caesarea (Calderon 2000:143). The Jaffa example should support this assumption. At Dhiorios, Cyprus, that pan type appeared in the 7th century CE (Catling and Dikigoropoulos 1972, fig.30:P149, P152).

Date range: 5th–6th cent. CE

504 Pan

Reg. No. A/71/B143.5; Area A, Sq. I3

Rim diam.: 19.8; Max h.: 4

Everted rim creating sharp angle on outer face, sloping wall. Light brown ware (7.5YR6/3) and yellowish-red core (5YR4/6), a few small white and minute black grits, hard fired.

Pan with Wishbone Handle (No. 505)

Beveled rim, sloping wall ribbed on external face, rounded base. One wishbone handle attached below rim. The type was common during the Late Byzantine period in Jerusalem and its vicinity (Magness 1993:213, form 2:3, Magness 2012:291, pl. 9.4:1–2). In Jaffa, a single handle fragment was found.

Date range: late Byzantine

505 Pan

Reg. No. C/61/B81.3; Area C, Bucket 81

Cylindrical handle attached to rim. Weak red ware (2.5YR5/4), many minute white grits, hard fired.

Small Frying Pans (Nos. 506–507)

Two complete small pans were found in Area A, both displaying a thick heavy low and flared wall and wide flat base.

506 Pan

Reg. No. A/71/B317.2; Area A, Sq. J2, Bucket 317

Rim diam.: 19; Base diam.: 10; Max h.: 3

Thick rim with concaved top, heavy wall and flat base. Pale ware (2.5Y7/2) and dark reddish-gray core (2.5Y2.5/1), few small white grits, a few minute quartz grits, hard fired.

507 Pan

Reg. No. 79/A/70/140; Area A, Sq. J3, Bucket 35

Rim diam.: 17.3; Base diam.: 10.5; Max h.: 2.5

Thick rim with concaved top, heavy wall and flat base. Weak red ware (2.5Y6/3), reddish-black core (2.5Y2.5/1), hard fired.

Miscellaneous (No. 508)

Short and Heavy handle probably belonging to a frying pan. No parallels were found.

508 Pan

Reg. No. C/61/B250; Area C Bucket :250

Short handle with infolded edges. Reddish-brown ware (5YR5/4) dark gray core (5YR4/1), a few large black grits, hard fired.

9.2.6. Cooking Pot Lids

Cooking pot lids were recovered at several sites in a small number. Berlin suggested that many vessels could have served as covers, so they were not especially made (Berlin 1997:115). In addition, other with ring-shaped handles probably served as lids. In Benghazi, they began to be common during the Hellenistic period when they reached their peak and comprised 9% of the total coarse pottery (Riley 1979:319, fig.59). In Israel, the cooking pot lid appeared in significant numbers, but not before the Early Hellenistic period, in two distinctive types: with a knobbed handle and with a ring handle. In the Early Roman period, imported cooking pot lids, mainly from Southern Italy, reached Israel and appear in small quantities in the Coastal Plain and in northern sites in connection with Roman soldiers (Berlin 1997:116). In Jaffa, the following types were recovered.

9.2.6.1. Small Lids (Nos. 509–511)

Lugged solid or hollow lid, sometimes a flat handle, sloping wall and upturned or inturned rim. They can be considered amphora stoppers as well as cooking pot lids. Their diameter can suit both functions. The local cooking ware fabric seems to fit better with the second function. In Jaffa, three complete examples made of cooking ware appeared. A similar type appeared in Dor in Late Persian contexts and continued to appear in the 2nd century BCE (Guz-Zilberstein 1995:302, fig. 6.24:1–3). In Israel, they probably functioned as a Hellenistic cooking pot covering.

Date range: Hellenistic

509 Lid

Reg. No. 79/A/70/234; Area A, Bucket 242

Rim diam.: 13; Max h.: 5.5

Pyramidal body, concaved wall with curved upturned rim. Light gray ware (10YR7/2), many small black grits, medium fired.

510 Lid

Reg. No. 79/A/70/141; Area A, Sq. J3, Bucket 31

Rim diam.: 12; Max h.: 4.7

Pyramidal body, concaved wall with curved slightly inturned rim. Very pale brown ware (10YR8/2), many minute red grits, medium fired.

511 Lid

Reg. No. 79/A/72/137; Area A, Locus 754, Bucket 533

Rim diam.: 10.8; Max h.: 4

Pyramidal body, concaved wall with curved upturned rim. Light reddish-brown ware (5YR6/3), hard fired.

9.2.6.2. Knobbed Handle (Nos. 512–518)

Small solid knobbed handle, convex wall terminating with flared slightly upturned lip. Their relatively large diameter was probably suitable for casseroles and not for cooking pots. This type of lid is considered the most common in the Hellenistic Israel repertoire as well as elsewhere. The knobbed handle lids were typical of the Hellenistic tradition and appeared in the Athenian Agora in 3rd to mid-2nd century BCE contexts (Thompson 1933:32, A58; 391, D73). In the Early to Mid-Roman period the knobbed handle is cruder (Robinson 1959:19, pl. 4:F86–87; 68, pl.14:K107). In Benghazi, similar examples were dated from the Late Hellenistic to the 1st century BCE (Riley 1979:321, fig. 119:756). In Israel, the type is common in limited areas, mainly in Hellenistic coastal sites. It was recovered in Dor, Shiqmona and Caesarea in 3rd–2nd century BCE contexts (Guz-Zilberstein 1995:302, fig. 6.1:39–40; 6.24:4–9; Elgavish 1974:41, pl. XXIX:277; Oleson 1994:122, fig. 54:K77). More examples appeared in Jericho in a Hasmonean context (Bar-Nathan 2002:94, pl. 16:264–5) and Maresha dated to the 1st century BCE (Levine 2003:84–5, fig. 6.3:42–44).

Date range: 3rd–1st cent. BCE

512 Lid

Reg. No. 79/A/70/132; Area A, Sq. K3, Bucket 20

Rim diam.: 17; Max h.: 5

knobe handle, convex body, curved and slightly upturned rim. Red ware (2.5YR5/6), many small black-grits.

513 Lid

Reg. No. 79/C/65/556; Area C, Bucket 776

Rim diam.: 24; Max h.: 6

knobbed handle, convex body, curved and slightly upturned rim. Dark red ware (2.5YR4/6), reddish-brown core (5YR4/4), medium fired.

514 Lid

Reg. No. C/61/B324.1; Area C, Sq. DD102, Locus 417, Bucket 324

Rim diam.: 22.5; Max h.: 3.5

Sloping wall with out-turned lip. Weak red ware (2.5YR5/4), reddish-brown core (2.5YR3/1), a few minute white grits, hard fired.

515 Lid

Reg. No. A/70/B32.3; Area A, Sq. J4, Bucket 32

Rim diam.: 18; Max h.: 2.5

Sloping wall with out-turned lip. Reddish-yellow ware (7.5YR6/6), many small black grits, medium fired.

516 Lid

Reg. No. A/70/B32.2; Area A, Sq. J4, Bucket 32

Max h.: 2.5

Plain sharply beveled rim, sloping wall. Reddish-yellow ware (7.5YR6/6) and black slip, many small black grits, medium fired.

517 Lid

Reg. No. C/61/B703; Area C, Sq. CC100, Locus 433, Bucket 704

Rim diam.: 16; Max h.: 2

Rounded wall, thick lip. Light reddish-brown ware (5YR6/4), many small white grits, hard fired.

518 Lid

Reg. No. 79/A/60/011; Area A

Rim diam.: 11.2

Plain sharply beveled rim, sloping wall. Gray ware (7.5YR6/1), hard fired.

9.2.6.3. Flattened Handle (No. 519)

Flat handle and sloping wall terminated with inturned or out-turned rim.

In Jaffa, a single example was found. No identical parallels were found in Israel. The most similar example with an inturned rim was found in Qumran dated to the mid-1st century CE (Lapp 1961:181, Type 62a). Other fragments from Tel Anafa and Tel Keisan lack the upper part (Berlin 1997:120, pls. 35:PW317; Breind 1980:107, pl. 11:11). At Tell el-Ful, the same form was described as Hellenistic small bowls dated to the 2nd century BCE (Lapp 1978:104, fig. 77:19).

Date range: 2nd cent. BCE to mid-1st cent. CE

519 Lid

Reg. No. 79/A/73/133; Area A, Locus 752, Bucket 406

Rim diam.: 18; Max h.: 5.5

Pyramidal body with flattened and slightly concaved top, concaved wall with curved inturned rim. Weak red ware (2.5YR6/4) and core (2.5YR 6/3).

9.2.6.4. Flattened Incurved Rim (Nos. 520–521)

Obliquely cut rim probably to fit a casserole, rounded wall and probably knobbed handle with steam hole. In Jaffa, a few examples were found, the first with an inturned lip (520) and the second with a flattened lip (521). Both have parallels in Caesarea dated to the 3rd–4th century CE (Tomber 1999:311, fig. 3:64). The type is absent from other sites.

Date range: 3rd–4th cent. CE

520 Lid

Reg. No. C/61/B671.5; Area C, Sq. DD101, Locus 429, Bucket 671

Rim diam.: 22; Max h.: 6

Concaved wall with in-turn rim. Gray ware (7.5YR6/1).

521 Lid

Reg. No. C/61/B703.1; Area C, Sq. DD102, Bucket 703

Rim diam.: 26; Max h.: 4.8

Thick rim flattened at top and slightly concaved, heavy wall narrowing downward. Red ware (2.5YR6/6) and reddish-brown core (2.5YR3/1), a few small and medium white grits, hard fired.

9.2.6.5. Miscellaneous (Nos. 522–528)

In Jaffa, a relatively large number of unidentified lid forms were found. One type displays a wide shelf rim with upturned lip (526) and another is made of fine cooking ware (522). Two were found in Area C in a context dated to the Mid-Roman period (525, 527). Others are probably dated from the Hellenistic to the Early Roman period (523, 524, 526, 528).

Date range: Hellenistic–Early Roman

522 Lid

Reg. No. A/70/B204.4; Area A, Sq. K4, Bucket 204

Rim diam.: 23; Max h.: 1.5

Flat wall with burnished outer face. Reddish-brown ware (5YR5/4) and yellowish-red core (5YR5/6), many small white grits, medium fired.

523 Lid

Reg. No. A/70/B314.1; Area A, Sq. L4, Bucket 314

Rim diam.: 29; Max h.: 2.5

Sloping wall and folded rim. Reddish-brown ware (5YR5/4) and dark gray core (5YR4/1), many small black grits, many small quartz grits, hard fired.

524 Lid

Reg. No. A/70/B203; Area A, Sq. K4, Bucket 203

Base diam.: 4.3; Max h.: 2.7

Ring handle, sloping ribbed wall. Light yellowish-brown ware (10YR6/4) and grayish-brown core (10YR5/2), many minute black grits, medium fired.

525 Lid

Reg. No. C/65/631; Area C, Bucket 969

Max h.: 2.5

Knobbed handle. Reddish-brown ware (5YR5/3) and dark reddish-brown core (5YR3/4), many small quartz grits, medium fired.

526 Casserole/Lid ?

Reg. No. A/70/B276; Area A, Sq. L4, Bucket 276

Rim diam.: 21; Max h.: 2.3

Shelf rim rising up at outer edge, rounded wall. Brown ware (7.5YR5/4), soft fired.

527 Lid

Reg. No. 79/C/61/378; Area C, Sq. DD100, Locus 414, Bucket 133

Rim diam.: 8.7; Max h.: 1.5

Circular disc with curved rim with straight sides, small pinched handle at center. Very pale brown ware (10YR7/3), many small white grits, hard fired.

528 Lid

Reg. No. 79/A/70/188; Area A, Sqs. K3–J3, Bucket 146

Rim diam.: 9.8

Round hole in center, traces of lug(?) handle. Pinkish-gray ware (7.5YR7/2) and pink core (5YR7/4), many minute black grits, hard fired.

9.3. Storage Containers or Dolia

9.3.1. Persian Pithos (No. 529)

Open and deep vessel, thick and hooked rim. No parallels was found, however the context seems to be Persian–Hellenistic.

529 Pithos ?

Reg. No. A/70/B314.3; Area A, Sq. L4, Bucket 314

Rim diam.: 48; Max h.: 5

Thick hooked rim, sloping wall. Reddish-gray ware (5YR5/2), very dark gray core (5YR3/1), many small white grits, hard fired.

9.3.2. Herodian Type (Nos. 530–531)

Squared everted rim, globular body and disc base. Two loop handles decorated with grooved and thumb impression in bottom, where it is attached to the shoulder. The fabric is extremely thick and coarse and the wall is heavy and well fired, in red color.

The term *dolium* was coined by the Romans to describe a relatively large and heavy storage container used for the storing of wine, oil, water and grain. The *dolium* or the Israeli pithos was used by the Greeks

and Romans and is known from sites around the Mediterranean such as Athens, Tarsus and Hama (Rotroff 1997:44, 369; Jones 1950:168, figs. 168:205, 191:357; Papanicolaou and Johansen 1971:46, fig. 21:192, 193).

In Israel, the Byzantine dolium was found in large numbers in warehouses of the industrial quarters in Caesarea and Sepphoris where they were sunk into the floor as a drainage container in the process of manufacturing wine or oil (Patrich 1999:154–6, 161, figs. 10–11; 2008:10).

In Jaffa, an almost complete dolium, except for the rim, was found in the dwelling house in Area C (530) and was preliminarily published (Kaplan 1964:9, fig. 1:4, pl. 2:1). Another rim fragment was found in Area A (531). A similar assemblage of 50 vessels, dated from the late 1st century BCE to the late 1st century CE was recovered in Masada. Most of them were found in the Herodian storeroom complex but later on, during the Zealot occupation, some of them were removed to the central courtyard of the Western Palace (Bar-Nathan 2006:39–41). At Masada the dolium was most probably used for grain storage by the local inhabitants. Similar Dolia were found during the 2nd century CE in the Herodian palaces in Caesarea (Bar-Nathan and Adato 1986:163, fig. 2:11) as well as in Machaerus (Loffreda 1996:33–37). The type was produced in a royal workshop (Bar-Nathan 2006:40) and probably served the needs of the Jewish population in Israel sites. This assumption can imply that Jaffa and the dwelling house in Area C were part of a Jewish complex.

Date range: late 1st cent. BCE – 2nd cent. CE

530 Dolium

Reg. No. 79/C/61/442; Area C, Locus 432, Bucket 621,

Base diam.: 28; Max h.: 80

Spherical body, disc base, two loop handles decorated with grooved and thumb impression in bottom, where they are attached to shoulder. Red ware (2.5YR5/6), many huge white black and gray grits, hard fired.

531 Dolium

Reg. No. 79/A/56/181; Area A

Rim diam.: 30.5; Max h.: 8.5

Squared everted rim. Brown ware (7.5YR4/3), many large black grits, hard fired.

9.3.3. Late Roman Types (Nos. 532–533)

The first example has a thick heavy rim folded outward. The second has a squared rim with a wide neck. A similar rim with squared rim was found in Anemurium dated to the Late Roman period (Williams 1989:82, fig. 48:487).

Date range: Late Roman

532 Dolium

Reg. No. C/65/640; Area C, Bucket 766

Rim diam.: 37.5; Max h.: 4.4

Out-turned thick rim. Brown ware (7.5YR4/2), many large white black and gray grits, hard fired.

533 Dolium

Reg. No. 79/G/64/069; Area G, Sq. 26, Bucket 30

Rim diam.: 34; Max h.: 4

Incurved thick rim, hooked-like in section. Pale red ware (2.5YR7/4), many large white and a few black and gray grits, hard fired.

9.3.4. Wide Necked Containers (Nos. 534–537)

Heavy rim, flared neck. Coarse and crispy ware.

In Jaffa, a few rim fragments were found in the dwelling house in Area C with a turndown lip and plastic thumbed decoration below rim (534–535). The fabric seems to be of Egyptian origin. A few examples were found as well in the Jewish Quarter of Jerusalem (Geva and Rosenthal-Heginbottom 2003:178–9, fig. 6.6:7–

10) and were dated to the 3rd–5th century CE (Magness 1993:235–6, form 2). Other fragments in Jaffa made of the same coarse ware display a plain rim (536) and flanged handles (537).

Date range: 3rd–5th century CE

534 Dolium

Reg. No. C/65/B1018.3; Area C, Sq. CC103, Bucket 1018

Rim diam.: 27; Max h.: 3.7

Flanged grooved outside rim, heavy sloping wall. Reddish-brown ware (5YR5/3) and dark gray core (5YR4/1), medium fired.

535 Dolium

Reg. No. 79/C/65/553; Area C, Sq. CC103, Bucket 1018

Rim diam.: 28; Max h.: 6.5

Flanged rim, sloping wall, rope decoration below the rim. Reddish-brown ware (5YR5/3) and dark gray core (5YR4/1), medium fired.

536 Dolium

Reg. No. C/65/B1018.2; Area C, Sq. CC103, Bucket 1018

Rim diam.: 24.5; Max h.: 4.5

Plain rim, heavy sloping wall.

537 Dolium

Reg. No. A/70/B349.1; Area A, Sq. L4, Bucket 349

Rim diam.: 25; Max h.: 4

Tunneled rim, thick wall with two flanged handles below rim. Pink ware (7.5YR7/4), many minute white and a few minute red grits, hard fired.

9.4. Jars

9.4.1. Persian Jars

Straight Shoulder Jars

Squat everted rim upon a flat shoulder carinated at junction with bi-conical or bag-shaped body, rounded or pointed base. Two twisted handles attached from carinated shoulder to body. The type was well known in the local tradition of the Iron Age from the 9th century BCE and continued to be the most common jar of the Persian period.

The type is well represented in the Coastal Plain of Syria in al-Mina (Woolley 1938:1–30; 135–170) and Lebanon as well as Cyprus (Gjerstad 1948, pls. 62, 67), Egypt and Carthage (Bennett and Blakely 1989:207; Stern 1982:110–1). The type served also as the container for the common Phoenician marine trade as is evident from the Punic settlements in the Western Mediterranean such as Tell Sukas (Stern 1995:58). Its was primarily found along the eastern Mediterranean shore. In addition, the NNA results identified the type as a Lebanese transport jar that was manufactured probably at Sarepta-Sarafand (Bennett and Blakely 1989:209; Barag 1961, pl. 7:7). At the same time, petrographic analyses at Tel Michal and Apollonia identified the ware source as the Carmel Coastal Plain (Goldberg 1989:264, 266) or the Shephelah region (Tal 1999:104). However, the various fabrics suggest several manufacture centers along the Levantine coast and more likely as being of Syro-Phoenician region (Gjerstad 1960:113).⁶¹ In Israel, the type was distributed in the Galilee and Coastal Plain (Shiqmona, Megadim, 'Atlit, Tell Qasile, Lachish, Tel Jama etc.).

In Jaffa, a huge number of fragments were found, which supports the identification of the type as the most popular along the coastal sites of Israel.

According to Stern's classification, which was followed by many scholars, that type served for transportation and storage and had nine morphological stages of development (Stern 1982:107–110, Type H1–9). Stern's division still reflects the right chronological development even though during recent researches in

⁶¹ Gjerstad 1960:105–122.

Gezer and Dor the scholars identified two basic body forms that probably do not indicate a chronological development (Gitin 1990:229–231; Stern 1995:61–62).

Bi-conical body shape. Flat shoulder sharply carinated toward slightly concaved wall at upper part of twisted body. (Stern Types H2–H3, H6–H7, H9). (539–541).

Bag-shaped body. Oblique shoulder less carinated at junction with vertical wall flared toward lower bag-shaped body (Stern TypeS H1, H4, H8). (538, 542–551).

Further studies, including petrographic analysis, would determine if it can serve as evidence for various form fashions in several centers of manufacture.

The Jaffa assemblage was divided according the previous classification into the following subtypes.

A. High Rim (Early Transitional Type) (No. 538)

High thickened rim, narrow sloping neck, flared wall toward bag-shaped lower body, rounded base.

In Jaffa, there is a single example that can be classified as an early stage of development or a transition type between the Iron Age and Early Persian flat shoulder jar. The rim is high and the body is wide and seems to be an antecedent of the earlier type. The transitional subtype was classified by Stern as Type H1 dated to the 6th–5th centuries BCE (Stern 1982:109). A similar jar appears in Gil'am at the Persian level (Stern 1970:38, fig. 8:9). At Ashdod, examples were found in several pits and installations that display a continuity from the Iron IIc to the Persian period (Ben Shlomo 2005:235, fig. 3.111:5–6).

Date range: late Iron IIc–early Persian

538 Jar

Reg. No. 79/A/70/123; Area A, Sq. K4, Locus 509, Bucket 280

Rim diam.: 10; Max h.: 18

Thickened rim, leaning shoulder, sloping wall widening down, two loop handles from shoulder to body. Light reddish-brown ware (5YR6/4) and yellowish-red core (2.5YR5/6), a few white and black grits, hard fired.

B. Biconic Body (Nos. 539–541)

Short knobbed or with pointed top rim, flat shoulder and biconical body terminated with pointed base. This type was developed according to parallels found in the tomb near Tell er-Ras from a more concaved toward a less concaved upper part of body (Onn 1999:60–61, fig. 14). In my opinion, the more concaved body is identical to the Stern Type H6 while the less carinated is similar to Stern H9. The first is the most common type along the Shephelah and the coast while both appear in Cyprus, Rhodes, and Egypt and should be connected to the Phoenician trade. Lapp connected the new short rim with the pointed or rounded top type to the late 6th century (Lapp 1970:183, fig. 4:6).

The Jaffa examples can be divided according to two trends even though other parallels contradict the assumption that the morphological variations are an indication of chronological developments: Type B1 (540) and Type B2 (539, 541). The earlier appearance of the type occurred during the late 6th century in Dor and Apollonia (Stern 1995:58–62, fig. 2.7:3–7; Tal 1999:103, fig. 4.13:19–24). A jar from Shiqmona was dated to the early 5th century (Elgavish 1968:39, pl. LI:106). At Tel Michal, the shape appeared in the 5th century levels X and IX (Singer-Avitz 1989:119, fig. 9.1:23–24; fig.9.3:7–8). At 'Atlit (Tombs 16, 24) dated to the 5th century BCE (Johns 1933:60–61, fig. 16:m). In the Phoenician tombs near Tel Samaria (Lochamé Hageta'ot), dated to the 5th–4th centuries BCE, Types A and B appear together with bag-shaped jars (Mesika 1996:36, fig. 3:1–3, 7). At Tell el-Hesi, similar examples were dated from the early to the mid-5th century (Bennett and Blakely 1989:207–210, fig. 170). At Tel Keisan, the biconical Types B1 and B2 were dated to the late 4th century BCE (Briend 1980:105, fig. 7:4). At Tel Mevorakh, Types B1 and B2 were connected to the pits of levels V and VI and dated from the mid-5th to the early 4th century BCE, while additional examples were identified according to their fabric as late 4th century, and assigned Pit 8 to Stratum IV dated from the mid- to the late 4th century BCE (Stern 1978:33–4, fig. 6:1–3, 7). The many parallels indicate a 5th to early 4th century appearance of several variations that can be classified according to fabric and form to several manufacturing centers, probably along the Coastal Plain. The type is missing from the southern region.

Date range: late 6th–5th cents. BCE

539 Jar

Reg. No. A/71/B167.2; Area A, Sq. I5, Bucket 167

Rim diam.: 12; Max h.: 8

Thick outcurved rim, straight shoulder at sharp angle with bi-conical shaped body.

Red ware (2.5YR5/8), many small white and red grits, hard fired.

540 Jar

Reg. No. A/71/B349.1; Area A, Sq. I3, Bucket 349

Rim diam.: 10.5; Max h.: 5

Thick outcurved rim, straight shoulder at sharp angle with bi-conical shaped body.

Red ware (2.5YR6/8), many small and large white grits, hard fired.

541 Jar

Reg. No. C/61/601; Area C, Sq. DD101, Bucket 718

Rim diam.: 9.2; Max h.: 8

Thick outcurved rim, straight shoulder at sharp angle with bi-conical shaped body, incised letter(?) on wall below shoulder. Red ware (2.5YR6/6), hard fired.

C. Sack-shaped Body (Nos. 542–550)

Low knobbed rim, flat slightly sloping shoulder, vertical wall flared at lower part of the bag-shaped body.

It seems to be the most common subtype in Jaffa. Stern classified the form as Type H8 that, like the former type, was connected to the Phoenician maritime trade but limited to the Coastal Plain and northern parts of Israel (Stern 1982:112, pl. 153). The type was common during the 5th century until late 4th century BCE along the Coastal Plain and the Shephelah and appeared at almost every Persian site in the region, such as 'Atlit (Stern 1982:112, pl. 153), Dor (Stern 1995:58–61, fig. 2.8:1–21), and Tel Michal (Singer-Avitz 1989:115, 141, fig.9:17). At Shiqmona, in a storage room dated to the late 4th century, ten jars were recovered (Elgavish 1968: 49–50, pl lx:139). In the northern part of the country, the type appeared in Lohame Hagetaot (Mesika 1996:36, fig. 3:4–5; Onn 1999:61, fig. 6:3), Tel Keisan (Nodet 1980:121, pl. 18:1, 3), Tel Qiri (Avisar 1987:fig. 4:13). and Yoqne'am (Cimadevilla 2005:417, fig. IV.16:3–4). The type reached even as far as En-Gedi (Stern 2007:203, fig. 5.2.5:6)

Date range: 5th–4th cents. BCE

542 Jar

Reg. No. 79/A/56/208; Area A, Sq. I8

Rim diam.: 10; Max h.: 22

Thickened rim, straight shoulder, bag-shaped body.

Two loop handles attached from shoulder to wall. Pale brown ware (10YR6/3), many medium black grits, few large red grits, medium fired.

543 Jar

Reg. No. A/72/B94.2; Area A, Sq. J2 J3, Bucket 94

Rim diam.: 10; Max h.: 12

Thickened rim, straight shoulder, bag-shaped body.

Two loop handles attached from shoulder to wall. Very pale brown ware (10YR7/3), small many black grits, hard fired.

544 Jar

Reg. No. A/70/B214.3; Area A, Sq. K3, Bucket 214

Rim diam.: 9.5; Max h.: 6

Thickened rim, straight shoulder, Two loop handles attached from shoulder to wall. Reddish-yellow ware (5YR6/6), many minute black grits, hard fired.

545 Jar

Reg. No. 79/X/60/004; Sounding X, Bucket 47

Rim diam.: 10; Max h.: 5

Thickened rim, straight shoulder, bag-shaped body.

Very pale brown ware (10YR7/3), a few small red grits, hard fired.

546 Jar

Reg. No. C/61/617; Area C, Sq. DD101, Bucket 714

Rim diam.: 10.5; Max h.: 6

Thickened rim, straight shoulder, bag-shaped body.

Very pale brown ware (10YR7/3), many small black grits, hard fired.

547 Jar

Reg. No. 79/A/55/103; Area A, Sq. H8, Locus 4B

Rim diam.: 10; Max h.: 3

Thickened rim, straight shoulder, bag-shaped body.

Very pale brown ware (10YR7/3), many small black and red grits, hard fired.

548 Jar

Reg. No. A/71/B143.1; Area A, Sq. I3, Bucket 14

Rim diam.: 11; Max h.: 3.5

Thickened rim, straight shoulder, bag-shaped body.

Reddish-yellow ware (5YR6/6), many small black grits, hard fired.

549 Jar

Reg. No. A/70/B214.2; Area A, Sq. K3, Bucket 214

Rim diam.: 7; Max h.: 4.5

Thickened rim, straight shoulder, bag shaped body. Very pale brown ware (10YR7/4), many minute black and few small red grits, hard fired.

550 Jar

Reg. No. 79/A/70/179; Area A, Sq. L3, Bucket 365

Rim diam.: 11

Thickened rim, straight shoulder, bag-shaped body.

Very pale brown ware (10YR7/3), many small black grits, hard fired.

D. Ridged Shoulder (No. 551)

High thickened rim, narrow sloping shoulder, carinated and ridged at junction with flared wall, bag-shaped body.

The type was classified by Stern as Type H5 dated to the 5th–4th centuries BCE (Stern 1982:111, pl. 151). Similar rim fragments at Gil'am, for unknown reasons, were identified as a rare and unique group of jars that resembled some from Shiqmona (Stern 1979:38, fig. 8:2–3, 12–14). However, in Shiqmona, in the late 4th century BCE Stratum B, two similar complete jars were found with Phoenician inscriptions among an assemblage of Persian jars. The inscriptions contained single letters and numbers and the word “*lamelech*.” This evidence suggests the locus was the storage room of a royal fortress, while the inscriptions indicated tax payments (Elgavish 1968: 49–50, pls. LIX:140; LX:143–144). The type can be dated to the 4th century according to Tel Keisan and Tel Mevorakh (Briend 1980:105, pl. 7:1; Stern 1978:33, fig. 6:10–12).

It is important to note that the suggested division is doubted according to the Yoqne'am Persian stratum (Stratum IX), which displays the various former subtypes dated to the Late Persian period (Cimandevilla 2005:417, fig. IV.16). The various jars in Yoqne'am were found on the storage room floor. The architectural technique connected the building to Phoenician tradition (Cimandevilla 2005:410, fig. IV.8).

The straight shoulder jar was the main type of container used by the Phoenicians in their Mediterranean trade. It comprises about half of the jars recovered from the southern Levantine coast (Barag 1961, pl. 4:7). The distribution pattern, according to parallels from Israel, confirms this assumption.

Date range: 4th cent. BCE

551 Jar

Reg. No. 79/Y/68/303; Area Y, Sq. X12, Locus L-1, Bucket 112

Rim diam.: 11; Max h.: 8

Plain steep rim, leaning shoulder ridged at junction with widening wall. Very pale brown ware (10YR7/3), many small white grits, medium fired.

Basket Handle Jars

Elongated body, narrowing down to a pointed base. Two basket handles rise high above the rim from one side to another.

The type was very popular along the eastern Mediterranean coast from al-Mina in the north to Naukratis in the south and throughout Cyprus. Stern, following Gjerstad, proposed Rhodes as the place of origin (Stern 1982:111).

In Israel, the type was recovered at most coastal sites and fortresses such as those near Ashdod (Porth 1974, fig. 4:14) and the Greek settlement at Mesad Hashavyahu (Naveh 1962, fig. 6:13; Fantalkin 2001:96 fig. 34:5). It seems possible that during the Iron Age the jars were imported from elsewhere, probably Rhodes or Cyprus, and were part of the plain East Greek ware, since at Mesad Hashavyahu they were found in together with East Greek pottery (Naveh 1962, fig. 6:13; Stern 1982:114–115; 1995:63). Based on the Tel Keisan fragments, the origin of the Iron Age bucket handle jar, dated to the 7th–6th centuries BCE, was not local. Those handles were incised with Phoenician letters (Salles 1980:134–139). In the Ma'agan Mikha'el shipwreck, at least nine jars were found as part of the “Load Ware” among a large cargo of East Greek table ware dated from the late 5th to the early 4th centuries BCE (Artzi and Lyon 2003:192–5, fig. 8:1–3). The following evidence is excellent proof for the manufacturing of bucket handle jars at the turn of the 5th century along the eastern Mediterranean shores, probably in Cyprus. Petrographic analysis revealed the Eastern Cypriot origin of a few examples from Tel Keisan (Gunneweg and Perlman 1991:591–599).

In addition to the jars manufactured in Phoenicia, local workshops along the Levantine shore imitated the prototypes. Petrology examination in addition to NAA analysis of the Tell el-Hesi eight stratified examples determines their local or northern coastal origins (Bennett and Blakely 1989:212–213). Petrographic analysis of jars from Tel Michal identified the Carmel region as the source of origin (Goldberg 1989:265). Recent thin section petrographic analysis of four fragments from Apollonia recovered from the Late Persian refuse pit in Area D, reveals the complexity of the issue. Two jar fragments were identified as being of local sources (Tal 1999:158, fig. 4.39:1–3, Table 4.10:29–30) while the other two, made of slightly different ware, were suggested as being of Phoenician coast or the Cypriot/Aegean region (Tal 1999:158, 185, fig. 4.39:3–11, table 4.10:31–32). This evidence can suggest manufacturing at numerous places throughout the eastern Mediterranean during the 5th–4th centuries BCE.

In general, the transition was from the early form dated from the late 7th century to the mid-5th century BCE, Stern Type 1 with biconical body and narrow shoulder, toward Stern Type 2, dated to the 5th–4th centuries BCE, with wider shoulder and sharpened body (Stern 1982:113–4, pl. 156–8). Further researches reinforced the division suggested by Stern. At Sukas, the entire range of shapes was found and divided into five general subtypes dated from the 7th to the 4th century BCE (Buhl 1983:16–23, with full references).

The Jaffa fragments can be a good case study for understanding the morphological and chronological development of the type. They appeared mostly in Area A except for two examples from Area Y (567, 569).

A. High Neck (Nos. 552–556)

The first type preserved the late Iron Age characteristics, a high neck with thickened rim, ridged at junction with shoulder. At Tel Michal, this type appeared only in the Persian cemetery as infant burial jars (Singer-Avitz 1989:137, fig. 9.15:1–2). A single rim fragment that was identified as Type II in Dor can be compared to the early subtype (Stern 1995, fig. 2.10:13). Nos. 554–556 were identified in Apollonia as the ridged neck jar, which would not fit neatly into the Stern typology and thus was restricted to Apollonia with a single parallel at Tell el-Hesi. The type can be also defined as a Late Persian krater similar to the Lehmann form 209/3–4 (Tal 1999:127, fig. 4.25:2; 158, fig. 4.39:17–18). At En-Gedi, a similar rim with a wider neck was identified as a Persian krater (Stern 2007:201–2, fig. 5.2.3:6–12).

Date range: 5th–4th cents. BCE

552 Jar

Reg. No. A/70/B214.1; Area A, Sq. K3, Bucket 214

Rim diam.: 11; Max h.: 6

Thickened rim, high neck ridged at junction with broad shoulder. Light brown ware (7.5YR6/4) and dark gray core (7.5YR4/1), many minute black grits, hard fired.

553 Jar

Reg. No. A/70/B188; Area A, Sq. K3, Locus 506, Bucket 188

Rim diam.: 11; Max h.: 5

Thickened rim, high neck ridged at junction with broad shoulder. Light brown ware (7.5YR6/4) and gray core (7.5YR5/1), many small white and black grits, hard fired.

554 Jar

Reg. No. A/70/B155.1; Area A, Sq. J3, Locus 504, Bucket 155

Rim diam.: 12; Max h.: 4

Knobbed projecting rim, wide neck. Light brown ware (7.5YR6/4), many small white grits, hard fired.

555 Jar

Reg. No. A/71/B130; Area A, Sq. I3, Bucket 130

Rim diam.: 8; Max h.: 4.6

Knobbed projecting rim, wide neck. Pale red ware (2.5YR7/4), many small white and black grits, a few large red grits, hard fired.

556 Jar

Reg. No. A/71/B163; Area A, Sq. I3, Bucket 163

Rim diam.: 12; Max h.: 5

Knobbed projecting rim, wide neck. Pale red ware (2.5Y7/3), many minute white and black grits, many small red grits, hard fired.

B. Everted Rim (Nos. 557–564)

Narrow concaved neck with flanged rim slightly hanging down at lip. Pronounced ridge at junction with shoulder. This subtype was dated at Sukas from the 5th to the early 4th century BCE (Buhl 1983:19–21, fig. V:56–61). The type is common in the Coastal Plain and appeared in Ma‘agan Mikha’el in a Late Persian context (Artzi and Lyon 2003:192–5, fig.8:1–2). At Dor it was described as Persian Type II (Stern 1995:63, fig. 2.10:10–13). In the Tel Michal Persian cemetery the type was used as an infant burial vessel and was also found in the 4th century context on the northern hill (Singer-Avitz 1989:137, figs. 9.15:3–4; 9.13:18). At Apollonia, the subtype was found at the Early Persian Level 2 dated from the late 6th to the mid-5th century (Tal 1999:101, figs. 4.13:1–3; 4.39:3–10). At Kadesh Barnea in Northern Sinai, two fragments were found with the Hebrew letter *shin* and the number Λ painted on the shoulder in the late Assyrian style common in Aramaic and Hebrew inscriptions of the Persian period. If the letter *shin* referred to the Hebrew word *shemen* (oil) and the number to 5 units of measurement (3.6 X 5=18 liters), we can suggest that the common contents of the bucket handle jars during the 5th–4th centuries BCE was oil (Dothan 1965:141, fig. 7:12–13). Nos. 558–560 like nos. 554–556 are made of finer ware that seems suitable for the Late Persian krater. At Gezer, a similar rim profile was identified as a Persian krater (Gitin 1990:234–5, pl. 31:19–21).⁶²

⁶² In Early Roman levels at Masada and Machaerus, ridged neck jars were retrieved that were close in shape to the Jaffa type. At Masada, 26 complete jars were found, 17 of them leaning on the wall of storage room 135 (Bar–Nathan 2006:47–48, pl. 3:8–12). A Tittuli Picti in Greek letters “*kalon kerameion*” (“beautiful Ceramic”) which means “better quality,” was written in black ink upside down near the handle or under the mouth. The inscription was interpreted by Cotton and Geiger as an inspection mark, a form of quality control (Bar–Nathan 2006:50). They were made and used during the Herodian period (28/29 BCE–6 CE). During the Zealot occupation they were reused as containers for special liquids which were delivered to the court of Herod in Masada and probably also in Machaerus, from a local production center (66–73/74 CE) (Bar–Nathan 2006:50; Loffreda 1996:37–38, fig. 9). Many jars were found with the bilingual text “*Zenon*” or “*Bar Yason*” and “*Shabyo*” which was added probably to the reused jar during the Zealot occupation and attributed to the owners (Cotton and Geiger 1989:184–190) or by the potters, fabricants, or merchants reflecting the prominence of Jews in trade and agriculture in Judea during Herod’s reign.

Date range: 5th–4th cents. BCE

557 Jar

Reg. No. 79/A/70/118; Area A, Sq. J3, Locus 510, Bucket 265

Rim diam.: 14; Max h.: 18

Everted rim, ridged at junction with rounded shoulder, traces of bucket handle. Pink ware (7.5YR7/4) and dark gray core (7.5YR4/1), many medium white and black grits, hard fired.

558 Jar

Reg. No. A/70/B174.3; Area A, Sq. K3, Bucket 174

Rim diam.: 14; Max h.: 4

Flat everted rim, low and wide neck ridged at junction with shoulder. Light yellowish-brown ware (10YR6/4) and brownish yellow core (7.5YR6/6), many minute white and black grits, hard fired.

559 Jar

Reg. No. A/70/B178.4; Area A, Sq. J4, Bucket 178

Rim diam.: 16; Max h.: 3

Flat everted rim, low and wide neck ridged at junction with shoulder. Light brown ware (7.5YR6/4), many small red grits, hard fired.

560 Jar

Reg. No. A/70/B178.2; Area A, Sq. J4, Bucket 178

Rim diam.: 14; Max h.: 3

Flat everted rim, low and wide neck ridged at junction with shoulder. Light brown ware (7.5YR6/4), hard fired.

561 Jar

Reg. No. A/72/B164.2; Area A, Sq. J2 J3, Bucket 164

Rim diam.: 12; Max h.: 2.8

Flanged rim, high neck. Reddish-yellow ware (5YR6/6), many small black grits, hard fired.

562 Jar

Reg. No. A/71/B143.3; Area A, Sq. I3, Bucket 143

Rim diam.: 11.5; Max h.: 3.5

Flanged rim, high neck. Reddish-yellow ware (5YR6/6), Medium fired.

563 Jar

Reg. No. A/70/B273.2; Area A, Bucket 273

Rim diam.: 12.7; Max h.: 5.5

Everted rim, rounded shoulder. Reddish-yellow ware (5YR6/6), many large black grits, hard fired.

564 Jar

Reg. No. A/70/B253.1; Area A, Sq. K4, Locus 509, Bucket 253

Rim diam.: 10; Max h.: 3.6

Everted rim, rounded shoulder. Pale red ware (2.5Y7/3) and weak red core (2.5Y5/3), many small gray grits, hard fired.

C. Neckless (Nos. 565–569)

Sharply everted rim, sometimes flattened at top, and wide shoulder, ridged at junction with rim. The type was dated in Sukas to the 5th–4th centuries BCE (Buhl 1983:21–22, fig. VII:65–78). Its substantial appearance in Israel is almost limited to the Coastal Plain. The type appeared during the 5th–4th centuries BCE in Shiqmona (Elgavish 1968, pls. XLIX:91; LVIII:137–138; XXXV:29), Tel Abu Zeitun, Megadim (Stern 1982, photos 156–157), Tel Mevorakh (Rosenthal 1978:35, fig. 8:12–16, pl. 25:10–16), Ashdod and its vicinity (Porath 1974:47, fig. 4:14, photo 4:14). At Apollonia, this subtype was in common use during the Late Persian Level 1 in Area H, and the refuse pit in Area D, both dated to the late 5th–4th centuries BCE (Tal 1999:126–7, fig. 4.24:1–7; 158, fig. 4.39:1–9). At Dor and Tel Michal, the subtype appears in large quantities throughout the late 6th to the mid-5th century (Stern 1995:63, fig. 2.10:1–9; Singer-Avitz 1989:118, fig. 9.1:15; 122, fig. 9.3:9). Their distribution in the hinterland was relatively low but still considerable. Fragments were found in Gezer dated to the 5th–4th centuries BCE (Gitin 1995:230, pl. 28:22). In Northern Israel,

in Kadesh and Tel Qiri, mainly handle fragments were found (Stern and Beit-Arieh 1973:101, pl. 2:6; Avissar 1987:19, fig. 4:15).

Even though the bucket handle jars seem to be one of the most common transportation vessels in the eastern Mediterranean during the Persian period, it seems that it cannot be considered the most popular jar type in Israel. According to the above parallels, this type appeared in small quantities in the Galilee and the Shephelah, and in comparable numbers in the Coastal Plain. Its mediocre appearance in Jaffa strengthens that assumption. The secondary use of that jar as a burial coffin for children at Tel Michal was probably imitated from its widespread practice in the Grecian world, which is also evident in Cyprus and Rhodes (Buhl 1983:17–18; Singer-Avitz 1989:118).

Date range: 5th–4th cents. BCE

565 Jar

Reg. No. A/70/B741.2; Area A, Sq. J3, Locus 510, Bucket 741

Rim diam.: 9.5; Max h.: 4

Thickened rim with flattened top. Light brown ware (7.5YR6/4) and brown core (7.5YR5/4), a few small red grits, many minute gray grits, hard fired.

566 Jar

Reg. No. A/72/B146.1; Area A, Sq. K4, Bucket 146

Rim diam.: 12.5; Max h.: 2.5

Thick and flattened top rim, ridged at junction with shoulder. Light brown ware (7.5YR6/4) and brown core (7.5YR5/4), few small red grits, many minute gray grits, hard fired.

567 Jar

Reg. No. 79/Y/68/302; Area Y, Sq. Z14, Locus L–12, Bucket 58

Rim diam.: 12; Max h.: 2.4

Thick rim with flattened top, ridged at junction with shoulder. Light brown ware (7.5YR6/4–6/3), a few small white grits, many small black grits, hard fired.

568 Jar

Reg. No. A/72/B164.1; Area A, Sq. J2–J3, Bucket 164

Rim diam.: 11; Max h.: 2.8

Thick rim with flattened top, ridged at junction with shoulder. Reddish-yellow ware (5YR6/6), many small black grits, hard fired.

569 Jar

Reg. No. 79/Y/68/301; Area Y, Sq. X12, Locus L–1, Bucket 121

Rim diam.: 10.5; Max h.: 2.3

Thick rim with flattened top. Light brown ware (7.5YR6/3) and red core (2.5YR5/8), many minute black and red grits, medium fired.

570 Jar

Reg. No. 79/A/56/195; Area A

Base diam.: 3; Max h.: 8

Conical base. Pink ware (2.5Y8/4), many large red and gray grits, hard fired.

571 Jar

Reg. No. 79/A/56/210; Area A

Max h.: 37

Conical body, flat stump base. Pinkish-white ware (7.5YR8/2) and pink core (7.5YR7/3), a few medium black grits.

Holemouth Jars

Neckless, thick rim, wide shoulders and cylindrical body, usually two to four handles attached from rim to body.

The holemouth jar is considered a continuation of the southern Iron Age tradition. The antecedent of the holemouth jar is the “Sausage” Iron Age jar, which was found later in a mid-6th century BCE context at Tell el-Ful with the rim attached to the shoulders (Lapp 1970:182, fig. 3:4–5; Lapp 1978:88–89, pl. 49). Stern identified three subtypes that were classified as separate families of a container called in Hebrew *pa'arur*, which continued the southern Iron Age tradition (Stern 1982:104–5). In Jerusalem, the type was identified as a mid-6th century krater since the attached four handles resembled that shape. Two fragments were decorated on shoulder with an incised chevron as a remaining feature of the Iron Age tradition (Tushingham 1985:35, fig 16:19–21).

In Jaffa were found three subtypes.

A. Neckless (Nos. 572–574)

Horizontal folded rim, ridged and connected to a wide globular body (Lapp 1970:182, fig. 3:5). Can be attributed to the Stern Type C3 dated to the 5th–4th centuries BCE (Stern 1982, photo 138).

The Jaffa fragments are undecorated and probably display the later development style. Similar vessels were found in Kadesh (Stern and Beit-Arieh 1973, fig. 8:11, pl. 2:11,13). At Apollonia, the type represented 3.97% of the common ware assemblage in Area D and was dated from the mid-5th to the mid-4th century BCE (Tal 1999:159, fig. 4.39:10–11). At Dor, the type was represented in 4th century contexts (Stern 1995:58, fig. 2.5:2–3). The type appeared as well in Yoqne'am in the Early Persian context (Cimadevilla 2005:417, fig. IV.15:7) and Tel Qiri (Avissar 2005:19, fig. 4:4–5).

Date range: 5th–4th cents. BCE

572 Jar

Reg. No. 79/A/56/191; Area A, Sq. H7

Rim diam.: 16; Max h.: 3.5

Horizontal folded rim, wide shoulder. Very pale brown ware (10YR7/3) and light brown core (7.5YR6/4), many medium grits, hard fired.

573 Jar

Reg. No. A/71/B143.2; Area A, Sq. I3, Bucket 14

Rim diam.: 14.5; Max h.: 2.3

Horizontal folded rim, wide shoulder. Light brown ware (7.5YR6/4), many small black grits, hard fire.

574 Jar

Reg. No. A/72/B349; Area A, Sq. I4, Locus 500a, Bucket 349

Rim diam.: 12.5; Max h.: 2

Horizontal folded rim, wide shoulder. Very pale brown ware (10YR7/3), many large gray grits. Hard fired.

B. Outfolded Rim (No. 575)

Thickened rim, infolded downward and decorated with diagonal small incisions on outer face, rounded body. A similar single fragment appeared in the Late Persian Level 1 at Apollonia (Tal 1999:128, fig. 4.26:10). At Beth-Shean, a close example appeared at the Hellenistic level (Johnson 2006:533, fig. 15.4:79–80).

Date range: late Persian–Early Hellenistic

575 Jar

Reg. No. 79/A/56/215; Area A

Rim diam.: 23.5; Max h.: 11

Thickened rim with outer fold, neckless, rounded shoulder. Very pale brown external ware (10YR7/4), light reddish-brown internal ware (5YR6/3) and brown core (5YR5/3), many small white grits, hard fired.

Torpedo Jar (No. 576)

Thick, everted rim creating a wide open mouth, narrow shoulders and a long and cylindrical body resembling a torpedo. Two handles attached from the lower part of the shoulders to the body. The base is pointed or onion-shape.

Stern defined the torpedo jars as Type G and divided them into three subtypes according to the number of handles: two, one or no handles. The type was dated to the 5th–4th centuries BCE (Stern 1982:109, photo 146).

Their origin remains obscure. Gjerstad attributed the type to a Syrian origin according to their common use throughout sites in Syria, Phoenicia and Palestine. They also appeared in Cyprus and Egypt (Stern 1982:108). Their distribution pattern in Israel is comprehensive and scattered. Examples are known mainly along the Coastal Plain but at the same time in the hinterland, north and south of Israel.

In Jaffa, isolated fragments appear (576) as is characteristic of many sites in Israel. Concerning their chronology, they flourish throughout the Persian period in small quantities. According to parallels from Dor, the type reach its peak from the 5th to the mid-4th century BCE (Stern 1995:62, figs. 2.9; 2.23:12). At Apollonia, the torpedo jar is well represented at the early and late Persian levels. The type comprises 1.52% of the common ware at the early Persian level and is represented by only two fragments at the late Persian level (Tal 1999:103, fig. 4.13:17–18; 125, fig. 4.25:23–24). The Tel Mevorakh examples are varied in size but appear only in Stratum IV dated from the middle to the end of the 4th century BCE (Rosenthal 1978:34, fig. 7:5–11).

Date range: 5th–late 4th cents. BCE

576 Jar

Reg. No. 79/A/70/178; Area A, Sq. L4, Bucket 361

Rim diam.: 10.5; Max h.: 6

Heavy everted rim, wide mouth, very short neck, leaning shoulder in sharp angle to body. Pink ware (7.5YR7/3), many minute black and a few large red grits, hard fired.

Bag-shaped Jar (No. 577)

Thick rim, low cylindrical neck, globular heavy bag-shaped body, two loop handles attached from shoulder to body.

The jar was classified by Stern as Type F. Their distribution was described as limited in number and range in Israel. According to Stern, examples appeared in Samaria, Hazor, Shiqmona, and Jaffa, dated to the 5th–4th centuries BCE (Stern 1982:106–7, photos 142–145). The discussed Jaffa example (Stern 1982, photo 142) was never found either at the storage room or in the Museum display. A single complete jar was found in the storage room in Shiqmona along with many straight shoulder jars dated to the late 4th century BCE (Elgavish 1968, pl. LIX:142). A large assemblage of 20 jars was found at Tel Michal, in a storage room and silo of the late 5th century context. Another group of jars was found in situ, on the floor of the pottery kiln, on the northern hill, dated from the middle to the end of the 4th century BCE (Singer-Avitz 1989:124, figs. 9.4:1–12, 9.5:1–9, 9.6; 133, 9.12:1–6). The clear evidence of local manufacturing in addition to the various chronological contexts produced a clear map of the jar typology development throughout the Persian period. According to the Tel Michal typology, the early bag-shaped jar was more globular and became narrower and more cylindrical as time went on.

In Jaffa, a single rim fragment was found (577), which seems similar to the Tel Michal later stage type dated to the late 5th–4th century BCE. Similar rim shapes appear in a Late Persian context in Apollonia, where they represent 6.35% of the common ware of the Late Persian Area H assemblage (Tal 1999:127, fig. 4.25:3–8). The bag-shaped jar appears mostly along the Coastal Plain and was probably manufactured in that region. At Tel Mevorakh, a few fragments were recovered dated to the end of the Persian period (Stern 1978: 34, fig. 7:1–4). At Dor, a few more were found, one of which was reconstructed and dated to the late 4th century BCE (Stern 1995:58, fig. 2. 6). The type was found as well in the Ma'agan Mikha'el shipwreck (Artzi and Lyon 2003:195–6, fig. 8:4).

A small number of fragments appeared in the north at Tel Qiri in an unstratified Persian context (Avisar 2005:19, fig. 4:7). In central Israel it was recovered at Gezer (Gitin 1990:229, fig. 29:1–9) and Tell el-Hesi (Bennett and Blakely 1989, figs. 152:41, 163:23). None of them were found in the southern regions.

Date range: late 5th–late 4th cent. BCE

577 Jar

Reg. No. 79/A/70/119; Area A, Sq. K3, Bucket 284

Rim diam.: 12.5; Max h.: 5.5

Thickened rim, ridge on neck. Very pale brown ware (10YR7/3), many minute black grits, hard fired.

9.4.2. Hellenistic Jars

Pseudo-Phoenician Jars

Thick outfolded rim, straight narrow shoulder, heavy sloping and widely ribbed wall, bag-shaped body. Two twisted loop handles attached from shoulder to body.

These jars, designed in the Phoenician tradition, were produced in several centers located within the territory that belonged to two southern Phoenician cities of Tyre and Akko (Hayes 1991:195; Bikai 1996:23, fig. 87:5–8; Avshalom-Gorni and Getzov 2002:79, fig. 7:19–23). The type was considered a Hellenistic development of the traditional Persian “Straight Shoulder Jar.” At Gil'am, three complete jars were found in situ that were identified as Late Persian and can be considered a transitional type of the Jaffa Hellenistic jar (Stern 1970:38, fig. 8:12–14). At Akko, the early 4th century type with angular shoulder was recovered (Dothan 1976:41, fig. 45:1). At the end of the 4th century and during the 3rd century BCE the shape ran through a few morphological changes.

In Jaffa, mainly the Late Hellenistic and Early Roman versions were recovered include two types.

A. Folded Rim (Nos. 578–582)

Even though the type is common in Jaffa, it is relatively rare at major coastal sites such as Tel Michal and Apollonia. Its distribution is limited to the Phoenician sites in the Galilee and along the northern shore. Examples were recovered at Tel Anafa (Berlin 1997:151–2, pl. 57:480), Tel Keisan (Briend 1980, pl. 7.8), Yoqne'am (Ben-Tor et al. 1983, fig. 8.1, pl. 2b), Yodfat, and Bet Zeneta, which lies close to the Phoenician Coastal Plain and can be connected to Phoenician trade routes (Avshalom-Gorni and Getzov 2002:81, 78, fig. 5.2:1). At Dor, a similar jar was classified as Type 3 dated from the late 2nd to the early 1st century BCE (Guz-Zilberstein 1995:312, fig. 6.38:7–9). At Shiqmona, a relatively large assemblage of completed jars called “Red Angulated Jar” was recovered. All the jars were found on the fortress floors, dated to 2nd century, pre-132 BCE (Elgavish 1974, pls. X:211, XVII:235, XXIII:251–252). At Ramat Hanadiv, the type is rather abundant and permitted reconstruction of the body, which became globular rather than bag-shaped during the Early Roman period (Silberstein 2000:421–425, pl. II:1–11). A few examples appeared in Caesarea (Olsson 1994:108, fig. 34:A66; Berlin 1992:118–9, fig. 54:6).

Jaffa was probably the most southern port city that made use of the Phoenician merchandise. It is rather surprising to find those jars in the Judean Desert. One complete jar was exposed in Masada dated to the Zealot context (66–73 CE) (Bar-Nathan 2006:73, pl. 16:92) and a few examples in Machaerus (Loffreda 1996:40, Type 5, fig. 8:1–8). At Jericho, identical jars were dated to 66–73/74 CE (Bar-Nathan 2006:73). This evidence raises the possibility of a Judean imitation of the Phoenician type or of a trade route from the coastal region to the Dead Sea area (Bar-Nathan 2006:43).

Date range: 2nd–1st cents. BCE

578 Jar

Reg. No. A/70/B304.3; Area A, Sq. L3, Bucket 304

Rim diam.: 10; Max h.: 11.5

Heavy thickened rim, leaning shoulder, cylindrical heavy and ribbed wall, two loop handles attached from

shoulder to wall. Reddish-yellow ware (7.5YR7/6) and pink core (7.5YR7/4), many minute white and black grits, a few medium red grits, hard fired.

579 Jar

Reg. No. C/61/B468; Area C, Sq. DD100–101, Bucket 468

Rim diam.: 10; Max h.: 5

Heavy thickened rim, leaning shoulder. Light brown ware (7.5YR6/4), many small black grits, hard fired.

580 Jar

Reg. No. C/61/B598; Area C, Sq. CC100, Locus 433, Bucket 598

Rim diam.: 14; Max h.: 4

Heavy thickened rim, leaning shoulder. Pink ware (7.5YR8/4; 7/4), many minute black grits, hard fired.

581 Jar

Reg. No. C/61/B339; Area C, Sq. DD102, Bucket 339

Rim diam.: 11; Max h.: 4.5

Heavy thickened rim, leaning shoulder. On upper rim double grooves and three vertical incisions. Light brown ware (7.5YR6/4), hard fired.

582 Jar

Reg. No. C/61/B259; Area C, Sq. DD102, Bucket 259

Rim diam.: 11; Max h.: 3.5

Heavy thickened rim, leaning shoulder. Pink ware (7.5YR8/4; 7/4), many minute black grits, hard fired.

B. Squared Rim (No. 583)

The rim became squared, the straight angled shoulder gradually became sloping and relatively thick and heavy, and the rim meets the shoulder with no neck.

At Yodfat and Beth Zeneta the type was dated to Roman times (Avshalom-Gorni and Getzov 2002:81, 78, fig. 5.2:2–5).

Date range: 1st cent. BCE to 1st cent. CE

583 Jar

Reg. No. C/61/B328.2; Area C, Sq. DD102, Bucket 328

Rim diam.: 12.5; Max h.: 6

Heavy thickened rim, leaning shoulder. Pink ware (5YR7/4) and dark gray core (5YR4/1), many minute black grits, hard fired.

C. Thickened Rim (Nos. 584–585)

The most developed example, dated to the Early Roman period, lacks a neck and the rim and shoulder are heavy and sloping.

The jars continued to be common throughout the Coastal Plain until the 2nd–3rd centuries CE. Examples appeared during the Early Roman period in Caesarea (Blakely 1987:48, 58, fig. 15:21; Oleson 1994:118, 119, fig. 40:A77–A78, Gendelman *forthc.* a; b) and in its environs such as in Shuni (Gendelman *forthc.* c) and Ramat Hanadiv (Calderon 2000:93, pl. 1:28; Silberstein 2000:425, pl. II:15). The type continued to be manufactured until the 2nd century CE as is evident from Shiqmona (Elgavish 1977:24, fig. IXX:145–149). A similar rim appeared in Machaerus (Loffreda 1996:40, fig. 8:3). In northern Israel, the type appeared in Beth Zeneta (Avshalom-Gorni and Getzov 2002:81, 78, fig. 5.2:6).

Date range: late 1st–3rd cents. CE

584 Jar

Reg. No. C/61/B290; Area C, Sq. DD101, Bucket 290

Rim diam.: 8; Max h.: 5

Heavy thickened rim, leaning shoulder. Light brown ware (7.5YR6/4), hard fired.

585 Jar

Reg. No. C/61/B216; Area C, Bucket 216

Rim diam.: 11; Max h.: 6.8

Diagonally cut rim, sloping wall. Pink ware (7.5YR8/4), a few small gray grits, hard fired.

Hellenistic Bag-shaped Jars

Thick everted rim, concaved neck, rounded shoulder and bag-shaped body. Two loop handles attached from shoulder to body.

The bag-shaped jar can be considered a continuation of the traditional Persian locally made storage jar. While the Persian jars display a thick and rounded rim, the Hellenistic rim became more elongated. The same process occurred in the body shape, which became narrower and shrank in size.

The Hellenistic bag-shaped jar was the most common storage jar, which was widely spread throughout the northern, central coast and the Sharon plain. It was manufactured during the Persian period throughout the Coastal Plain, probably in the vicinity of Tel Michal. Laboratory analysis of the Hellenistic stamped jar from Dor indicated a northern coastal source for its manufacture (Guz-Zilberstein 1995:311). Their wide distribution at every excavated coastal site such as Shiqmona,⁶³ Dor, Apollonia, Tel Michal, Jaffa, and Ashdod may confirm this hypothesis.

However, the type was probably manufactured as well in the center and southern area according to its popularity in Jerusalem and its vicinity (Lapp 1961:146–149, Type 11.2–3). At Jericho, a large quantity of rim fragments were found dated from the 2nd to the early 1st century BCE (Bar-Nathan 2002:27–8, pl. 3:12–16). It is interesting to note that over half of the Hellenistic rims collected in Bethel, Beth-Zur, Tell el-Ful, and Shechem were bag-shaped jars. At Tell el-Ful they were the typical 2nd century Hellenistic type (Lapp 1978:102).

In Jaffa, the bag-shaped jar can be considered one of the most common pottery vessel typical of the period from the 2nd until the mid-1st century BCE. The type can be divided into three main chronological subtypes according to many assemblages in Israel.

A. High Neck (Nos. 586–591)

A jar with the traditional bulbous rim and inclined neck. It is distinguished from its Persian antecedent by the typical Hellenistic fabric and was common throughout the 2nd century BCE. Along the Coastal Plain the subtype appeared in Dor (Guz-Zilberstein 1995:311, fig. 6.35), Ramat Hanadiv (Silberstein 2000:421, pl. 1:1–5), and Apollonia (Fischer and Tal 1999:240, fig. 5.15:2). Two of the three complete jars at Shiqmona display a pronounced rim and neck and large body, and seem to belong to Type A (Elgavish 1974:56, pls. X:212; XXVII:269). At Ashdod, the type was characteristic of the 2nd century BCE (Dothan 1971:60, figs. 21:1; 22:1, 3). In the interland, the type was common as well and was considered in Gezer as one of the two major jar forms of the Early Hellenistic period, typical of the 3rd to the mid-2nd centuries BCE (Gitin 1990:238, figs. 32:1–3; 33:7; 36:2–5). At Beth-Zur (Lapp 1961:148, Type 11.2a–c), Jericho (Bar-Nathan 2002:27–8, pl. 3:1214, 17–18), and Tell el-Ful (Lapp 1978:102, fig. 73) the type flourished during the 2nd century BCE. At Binyanei ha-Uma the type continued to appear until the mid-1st century BCE (Berlin 2005:30, fig. 1:2).

Date range: late 3rd to mid-1st cent. BCE

586 Jar

Reg. No. 79/A/56/258; Area A, Sq. F.5

Rim diam.: 9.5; Max h.: 45.5

Thickened everted rim, short neck, rounded shoulder, elongated bag-shaped body, rounded base, two loop handles attached from shoulder to body. Pink ware (7.5YR7/4), hard fired.

587 Jar

Reg. No. A/70/B368; Area A, Sq. K4, Locus 505, Bucket 368

Rim diam.: 12; Max h.: 7

⁶³ Three complete jars dated to pre-132 BCE were found in situ. It is impossible to identify their rim shapes since they appear only in photos (Elgavish 1974:56, pls. X:212, XXVII:268–269).

Thick everted rim, low neck, rounded shoulder. Pink ware (7.5YR7/3) and red core (2.5YR5/8), many small white grits, hard fired.

588 Jar

Reg. No. A/70/B155.2; Area A, Sq. J3, Locus 504, Bucket 155

Rim diam.: 11.5; Max h.: 5

Thick everted rim, low neck, rounded shoulder. Pink ware (5YR7/4), many small black grits, a few medium red grits, hard fired.

589 Jar

Reg. No. A/70/B184.1; Area A, Sq. J3, Bucket 184

Rim diam.: 12; Max h.: 3

Thick everted rim. Pink ware (5YR7/4), many small black grits, hard fired.

590 Jar

Reg. No. A/72/B35.2; Area A, Sq. K3–L3, Bucket 35

Rim diam.: 9; Max h.: 4

Thick everted rim. Pink ware (7.5YR7/4), many minute white and black grits, medium fired.

591 Jar

Reg. No. A/70/B178.3; Area A, Sq. J4, Bucket 178

Rim diam.: 9; Max h.: 5

Thick everted rim. Light brown ware (7.5YR6/4), many small black and quartz grits, hard fired.

B. Triangular Rim (No. 592)

Triangular rim section with an outward turning neck. It first appeared in Gezer in the late 3rd century and disappeared in the late 2nd century BCE (Gitin 1990:238, Type 160A, fig. 33:3–4). In Jaffa, a few rim fragments were indentified that can be paralleled with the Tel Qiri assemblage dated to the Early Hellenistic period (Avisar 1987:14, fig. 2:12). The type appeared in Dor (Guz-Zilberstein 1995:311, fig. 6.36), Tel Keisan (Briend 1980:105, pl. 8:1g), and was popular in the interland in Samaria during the Late Hellenistic period (Hennessy 1970:11, fig. 9:11). The type continued to appear until the mid-1st century BCE in Jericho (Bar-Nathan 2002:27–8, pl. 3:15).

Date range: 3rd to mid-1st cent. BCE

592 Jar

Reg. No. A/70/B161.1; Area A, Sq. K3, Bucket 161

Rim diam.: 11; Max h.: 4.8

Triangular rim in section. Pink ware (7.5YR7/4) and reddish-yellow core (5YR6/6), many minute white- and black grits, a few medium red grits, hard fired.

C. Elongated Flared Rim (Nos. 593–600)

Neckless, elongated rim with pointed straight lip creating a pseudo collar rim. At Gezer, the type appeared in the late 3rd century BCE and become the most dominant one during the 1st half of the 2nd century (Gitin 1990:238, Type 160 D, figs. 33:5, 34:14–16, 36:6–7). At Dor, the type continued to appear throughout the 1st century BCE (Guz-Zilberstein 1995:311, fig. 6.37:1–6). The same type was discovered at the 2nd century until the early 1st century BCE levels in Caesarea (Magness 1992b:118, fig. 54:4), Ramat Hanadiv (Silberstein 2000:421, pl. 1:6–12), Tel Michal (Fischer 1989:181, fig. 13.2:20–21) and Apollonia (Fischer and Tal 1999:240, fig. 5.15:6–10). At Shiqmona, a complete jar was recovered (Elgavish 1974:56, pl. XXVII: 268). A similar complete transitional jar was recovered in Area A in Ashdod and was dated to the early 1st century BCE (Dothan 1971:49, fig. 12:2). At hinterland sites, a similar jar rim appeared in Beth-Zur and Shechem in the mid-2nd century (Lapp 1961:146, Type 11.2c–e) and in Jerusalem and Qumran in the 2nd half of the 1st century BCE (Lapp 1961:149, Type 11.3h; Berlin 2005:30, fig. 1:4). At Tell el-Ful, all three rim forms were in use at the same time during the 2nd century BCE while the third one continued to be developed in the 1st century BCE. The collar rim became longer and can be considered the prototype of the Early Roman collar-ridged rim (Lapp 1978:102, figs. 74:1–3; 72). The type was found as well in Northern Israel at the Late

Hellenistic level at Tel Qiri (Avisar 1987:12, fig. 2:14), Tel Keisan (Briend 1980:105, pl. 8:1h), Beth-Shean (Johnson 2006:532, fig. 15.3:66–67), and Pella (McNicol, Smith and Hennessy 1992, fig. 78:14). At Binyanei ha-Uma the type appeared even as late as the mid-1st century BCE (Berlin 2005:30, fig. 1:4).

Date range: 2nd–1st cents. BCE

593 Jar

Reg. No. 79/A/70/120; Area A, Sq. K4, Bucket 204

Rim diam.: 12; Max h.: 15.7

Flared rim, rounded shoulder, two loop handles attached from shoulder to body. Traces of thumbed decoration next to one handle(?). Very pale brown ware (10YR7/3), many small black grits, hard fired.

594 Jar

Reg. No. C/61/4082; Area C, Bucket 4082

Rim diam.: 12.5; Max h.: 13.5

Flared rim, rounded shoulder, two loop handles attached from shoulder to body. Reddish-yellow ware (5YR6/6) and yellowish-red core (5YR5/6), many medium white grits, medium fired.

595 Jar

Reg. No. A/70/B178.5; Area A, Sq. J4, Bucket 178

Rim diam.: 9; Max h.: 4.6

Flared rim, rounded shoulder. Light brown ware (7.5YR6/4), many small black grits, hard fired.

596 Jar

Reg. No. A/70/B178.1; Area A, Sq. J4, Bucket 178

Rim diam.: 11; Max h.: 3.5

Flared rim, rounded shoulder. Light brown ware (7.5YR6/4), a few small red grits, hard

597 Jar

Reg. No. A/70/B204.6; Area A, Sq. K4, Bucket 204

Rim diam.: 11.5; Max h.: 5.5

Flared rim, rounded shoulder. Very pale brown ware (10YR7/3), hard fired.

598 Jar

Reg. No. C/65/B920.3; Area C, Sq. CC102, Bucket 920

Rim diam.: 11; Max h.: 5.8

Flared rim, rounded shoulder. Yellowish-red ware (5YR5/6) and gray core (5YR5/1), many small whitegrits, medium fired.

599 Jar

Reg. No. A/72/B33.2; Area A, Sq. L4 K4, Bucket 33

Rim diam.: 9; Max h.: 3.2

Flared rim, rounded shoulder. Yellowish-red ware (5YR5/6) and gray core (5YR5/1), many small whitegrits, medium fired.

600 Jar

Reg. No. C/61/B602; Area C, Sq. CC100, Locus 433, Bucket 602

Rim diam.: 10; Max h.: 3.3

Flared rim, rounded shoulder. Yellowish-red ware (5YR5/6) and gray core (5YR5/1), many small whitegrits, medium fired.

9.4.3. Early Roman Jars

Bag-shaped Jars

The Hellenistic bag-shaped jar continued its tradition during Roman times. The type underwent gradual changes, mainly in the rim and neck shapes, but preserved the bag-shaped body. The bag-shaped jar was widely spread until the 6th century CE and even later.

The existence of many Judean shapes in Jaffa besides the collared rim jars (especially in Area C) establishes and strengthens the connection of Jaffa with the trade routes of the Judean Desert. It is very interesting to note that the only other coastal site that displayed the shapes discussed below was Ramat Hanadiv (Silberstein 2000:pl. I:13–24).

The early type is distinguished by the collared rim that developed from low to high rim and later deteriorated in design. The Machaerus case can be the best example to demonstrate the development of the type in its typical distribution region: the Judean Desert. However, Loffreda did not divide the collared rim type. It is represented, without distinction, in a large number of fragments variations that were recovered in the Hasmonean and Herodian levels in Machaerus (90 BCE–72 CE) (Loffreda 1996:25–30, figs. 1–3).

In general, the collared rim type was most popular in hinterland sites such as Samaria, Jerusalem, and Qumran (Lapp 1961:147, Type 11.2f–g; Tushingham 1985, fig. 21:33–40, 44). At Tell el-Ful, the collared rim jars are the most popular during the Late Hellenistic period. The low collared rim jars dates to post-135 BCE and to the 1st century BCE while the high collared rim jars dated to 100–75 BCE (Lapp 1978:102, fig. 72). At Jericho, the type was the most common in the 1st century BCE palace complex. It is important to note that while the low collared rim was restricted to Hasmonean deposits dated to 85–31 BCE, the high collared rim continued to appear in the Herodian 1 deposits dated to 31–15 BCE (Bar-Nathan 2002:29, pls. 3:18–21; 4:22–25; 5:26–27). In the Jericho cemetery, the collared rim jars were usually associated with burials outside the tomb entrance. The low collared rim was dated to the early first century BCE while the high collared rim continued to appear in the early 1st century CE (Killebrew 1999:123, figs. III.62; III:63:2). At Masada, the low rim as well as the high rim variations appeared only in early contexts and represented only 3% of the entire collection of storage jars (Bar-Nathan 2006:51, pl. 4:13–18).

Bar-Nathan stated her opinion that the jar's manufacture was not limited to southern Israel. Other regional workshops were located in the central and northern areas, since the rim profiles are not completely identical (Bar-Nathan 2002:30). However, the Jaffa fragments seem to be completely similar to the other examples.

The Jaffa assemblage can be divided into the two following subtypes.

Bag-shaped Jar with Collar Rim

A. Low Collared Rim (Nos. 601–608)

Thick collar rim, concaved at inner face and flanged at outer face. As stated, the type appeared in the Judean Desert as well as the southern Coastal Plain. The most northern site with evidence of this type was Ramat Hanadiv (Silberstein 2000:421, fig. 1:13–14). At an early stage of development, the outer flange was more sharply pronounced and was followed by a less pronounced flange.

In Jaffa, subtype A1 appears with a pronounced flange on the rim outer face (601–602), while subtype A2 has a more triangular rim section (603–605).

The type was found in the 2nd century BCE in Gezer (Gitin 1990:239, figs. 34:17–22, 36:8, 12–18), Beth-Zur, Qumran and Jerusalem (Lapp 1961:146, Type 11.2 c–f). At Ashdod, it was dated from the 2nd to the early 1st century BCE (Dothan 1971:48, 144, fig. 12:1–2). During the 1st century BCE the type was popular in Jericho (Bar-Nathan 2002:29–30, pl. 3:18–24; Killebrew 1999:123, fig. III.62:1–3), Masada (Bar-Nathan 2006:51, pl. 4:14, 16) and Machaerus (Loffreda 1996:25, figs. 2:26–28; 3.30:31).

The later subtype A3 probably had a tiny flange at the mid-neck (606–608). At Gezer, the low collared rim jar was divided into four subtypes according to the flanged rim development (Gitin 1990:239, Type 161). It can be considered one of the two major jar forms common in the Late Hellenistic period. The early subtype appeared at the end of the 1st half of the 2nd century and became a dominant jar form in the mid-2nd century BCE while the less pronounced flanged rim was common during the 1st half of the 1st century BCE (Gitin 1990:239, pls. 34:17–22; pls. 36:8.12–18; 41:8; 43:19). More examples appeared in Jerusalem until the mid-1st century BCE (Tushingham 1985:57–9, fig. 24:2; Berlin 2005:30, fig. 1:8) and in Early Roman Machaerus (Loffreda 1996:25–30, fig. 3:55–59) until the mid-1st century CE.

Date range: 2nd–1st cent. CE

601 Jar

Reg. No. A/70/B174.2; Area A, Sq. K3, Bucket 174

Rim diam.: 11; Max h.: 5.5

Heavy collared rim concaved on outer face and flared on outer edge, low neck. Very pale brown ware (10YR7/3), many minute black grits, hard fired.

602 Jar

Reg. No. A/72/B31.3; Area A, Sq. K3–L3, Locus 703, Bucket 31

Rim diam.: 8; Max h.: 4

Collared rim, concaved on outer face and flared on outer edge, low neck. Pink ware (7.5YR7/4) and light brownish gray core (10YR6/2), many small white and black grits, medium fired.

603 Jar

Reg. No. C/61/B646.2; Area C, Sq. CC101, Bucket 646

Rim diam.: 11; Max h.: 4

Collared rim, concaved on outer face, and flared on outer edge, low neck. Very pale brown ware (10YR7/3), many small black grits, hard fired.

604 Jar

Reg. No. C/61/637.3; Area C, Sq. CC100, Locus 433, Bucket 637

Rim diam.: 9; Max h.: 5

Collared rim, concaved on outer face, and flared on outer edge, low neck. Pink ware (5YR7/6) and red core (2.5YR6/6), many small white grits, hard fired.

605 Jar

Reg. No. A/71/B287.2; Area A, Sq. I3, Locus 607, Bucket 287

Rim diam.: 10.5; Max h.: 4

Collared rim concaved on outer face, low neck. Light reddish-brown ware (5YR6/4) and yellowish-red core (5YR5/6), a few small white and many minute black grits, hard fired.

606 Jar

Reg. No. C/61/612; Area C, Sq. CC100, Locus 433, Bucket 634

Rim diam.: 9; Max h.: 9

Plain steep rim ridged at junction with shoulder. Red ware (2.5YR6/6) and dusky red core (2.5Y4/3), many small white grits, medium fired.

607 Jar

Reg. No. C/61/637.4; Area C, Sq. CC100, Locus 433, Bucket 637

Max h.: 5

Plain steep rim ridged at junction with shoulder. Pink ware (5YR7/4) and reddish-brown core (5YR7/4–5/3), hard fired.

608 Jar

Reg. No. C/61/B646.1; Area C, Sq. CC101, Locus 433, Bucket 646

Rim diam.: 9; Max h.: 5.2

Plain steep rim ridged at junction with shoulder. Pink ware (5YR7/4) and reddish-brown core (5YR7/4–5/3), hard fired.

B. High Collared Rim (Nos. 609–610)

Thick collar rim, flanged at lower part creating ridge at its bottom.

The collared rim jar was widespread in the Judean Desert and less frequent in the Coastal Plain and northern areas. Besides Jaffa, two complete samples were found in Ashdod in a context dated from the late 2nd to the early 1st century BCE (Dothan 1971:48, 144, fig. 12). Most other examples were recovered from the 1st century BCE and 1st century CE contexts in the Judean Desert in Jericho (Bar-Nathan 2002:30, pls. 4:25; 5:26–7; Killebrew 1999:123, fig. III.63:2), Tell el-Ful (Lapp 1978:102, fig. 72:30–31), Masada (Bar-Nathan 2006:51, pl. 4:17), Machaerus (Loffreda 1996:25, figs. 1:1–3; 2:1–17), Jerusalem, Qumran, and Samaria (Lapp 1961:147, Type 11.2g).

Date range: 1st cent. BCE to 1st cent. CE

609 Jar

Reg. No. 79/J/70/088; Area J, Bucket 33

Rim diam.: 5; Max h.: 7.5

High collared rim, ridged at junction with low neck. Pink ware (7.5YR7/4), a few big white and many small grits, medium fired.

610 Jar

Reg. No. C/61/B402; Area C, Sq. DD101, Bucket 407

Rim diam.: 9; Max h.: 6

High collared rim, ridged at junction with low neck. Pink ware (7.5YR7/4), many small black grits, hard fired.

Bag-shaped Jars with Ridged Neck (Nos. 611–619)

Plain flared rim, high neck, ridged at connection to shoulder. Cylindrical or bag-shaped body. The type is probably remnant of the former Hellenistic collared-rim, bag-shaped jar.

In Jaffa, many examples were found that are not identical and seem as though they were manufactured at several workshops. As in the case of the former collared rim type, its appearance is regionally limited as belonging to Southern Judean sites. The type appeared there almost exclusively during the 1st century CE. At Herodium, a large assemblage of mostly rim fragments was recovered from the upper floor of the service building dated to the 1st half of the 1st century CE (Bar-Nathan 1981:56–7, figs. 3:6–16; 9:3–4; 10:5–6). According to the repertoire, the body can be reconstructed as cylindrical rather than bag-shaped. A recent publication of the Jericho palace complex permitted a further understanding of the development of the collared rim toward a ridged rim during the transition from the Hasmonean to the Herodian period in Judea. At Jericho, the type is absent from Hasmonean deposits dated before 31 BCE. There it was the most common Herodian 3 jar dated to the 1st half of 1st century CE (Bar-Nathan 2002:Type J–SJ7, 33–34, pl. 6:39–43; 151–2, pl. 24:397–405). The type was widespread in Judea in the Second Temple period graves in Jerusalem⁶⁴ and Jericho (Killebrew 1999:123, fig. III.63:3–5), the Armenian Garden in Jerusalem (Tushingham 1985:55, figs. 21:34–37; 22:40), and many other Judean 1st century CE deposits. At Masada it was the main storage jar both in Herodian and Zealot contexts and was divided into four subtypes dated from 37/31 BCE to 6 CE and from 66 to 73/4 CE (Bar-Nathan 2006:52–56, Type 7). One of the jars bears a Titulus Pictus with the Hebrew word *כַּרְסִיָּא* (butcher) written in black ink (Bar-Nathan 2006:55, pl. 5:21).

In the coastal region it appeared sporadically in 1st century CE contexts at Ramat Hanadiv (Silberstein 2000:421, fig. 1:16–19), Caesarea (Bar-Nathan and Adato 1986:160, 171, fig. 1:1; Berlin 1992:118, fig. 54:5), and Nahalat Yehuda (Kaplan 1964:8, fig. 2:5). A single example appears in the northern site of Sussita from the 1st century BCE until the 2nd century CE (Młynarczyk 2003:66, figs. 5:11; 7:8).

The Jaffa evidence strengthens the idea of Judean influence on the pottery workshops of the Coastal Plain or, as Bar-Nathan noticed with great caution, the possible existence of more pottery workshops in addition to the southern ones (Bar-Nathan 2002:152).

Date range: 1st cent. CE

611 Jar

Reg. No. C/61/B503; Area C, Sq. CC101, Bucket 503

Rim diam.: 10; Max h.: 9.5

Plain steep rim ridged at junction with flared shoulder. Pink ware (7.5YR7/4), brown core (7.5YR5/2), many small white grits, hard fired.

612 Jar

Reg. No. C/61/B556.1; Area C, Sq. DD101, Locus 428, Bucket 556

Rim diam.: 10; Max h.: 6.5

Plain steep rim ridged at junction with shoulder. Light brown ware (7.5YR6/4), many medium white grits, hard fired.

613 Jar

Reg. No. A/70/B248.2; Area A, Sq. L3, Bucket 248

Rim diam.: 8; Max h.: 6.5

⁶⁴ For full references see Bar-Nathan 2002:152, n. 2.

Plain steep rim ridged at junction with shoulder. Very pale brown ware (10YR7/4) and pale brown core (10YR6/3), many small white and black grits, hard fired.

614 Jar

Reg. No. C/61/633.2; Area C, Sq. CC100, Locus 433, Bucket 633

Max h.: 5.8

Plain steep rim ridged at junction with shoulder. Very pale brown ware (10YR7/3) and grayish-brown core (10YR5/2), many small and medium white grits, hard fired.

615 Jar

Reg. No. C/61/B641; Area C, Sq. DD102, Locus 432, Bucket 641

Rim diam.: 12; Max h.: 5.8

Plain steep rim ridged at junction with shoulder. Very pale brown ware (10YR7/3) and grayish-brown core (10YR5/2), many small and medium white grits, hard fired.

616 Jar

Reg. No. C/61/611; Area C, Bucket 692

Rim diam.: 9; Max h.: 7.5

Plain steep rim ridged at junction with shoulder. Light brown ware (7.5YR6/4) and dark gray core (7.5YR4/1), many minute white grits, hard fired.

617 Jar

Reg. No. C/61/633.1; Area C, Sq. CC100, Locus 433, Bucket 633

Rim diam.: 10; Max h.: 6.5

Plain steep rim ridged at junction with shoulder. Light brown ware (7.5YR6/4) and dark gray core (7.5YR4/1), many minute white grits, hard fired.

618 Jar

Reg. No. 79/T/62/007; Area T, Grave 14, Bucket 2

Rim diam.: 9

ridged neck at junction with ribbed shoulder, two loop handles attached from shoulder to body. Pale red ware (2.5Y7/4–7/3), many medium white and a few medium gray grits, hard fired.

619 Jar

Reg. No. 79/A/73/107; Area A, Bucket 217

Max h.: 30

Rounded body, rounded base, vertical loop handle below shoulder. Pink ware (5YR7/4), many small white and a few small black grits, hard fired.

Bag-shaped Jars with Ledge Rim (Nos. 620–623)

High, slightly flared neck, ridged at bottom, tiny ledge at external lip, bag-shaped/cylindrical body.

The type can be treated as another transitional shape that developed parallel to the early 1st century CE ridged neck jar and was considered another variation of the Early Roman bag-shaped jar typical of the Judean region. In Jaffa, most fragments were found in the dwelling house in Area C. One complete jar was found on the ground floor level in the dwelling house in Area C that dated to the 1st half of the 1st century CE (620) (Kaplan 1964: 8, fig. 1:1).

Several Judean sites testify to the chronological development of this type.

The type appeared in the Jericho palace complex as an early variation with a cylindrical body and ridged neck dated to the 1st half of the 1st century CE (Bar-Nathan 2002:155, Type 13, fig. 24:415–7). At Masada, complete jars were recovered similar to the Jaffa Type A. One of them bears the Hebrew Titulus Pictus שמעון בן יויעזר (Shimon Ben Yoezer) in black ink. The type is considered one of the typical Zealot jars, dated from the 1st century CE (Bar-Nathan 2006:57–58, pl. 8:39–42). It continued to appear during the 2nd century in the caves of Wadi Murabba'at and Wadi ed Daliyeh (De Vaux 1961:30–31, fig. 7:2; Lapp and Lapp 1974:52, pl. 26:5–7).

Date range: 1st – mid-2nd cent. CE

620 Jar

Reg. No. 79/C/61/447; Area C, Sqs. DD102–CC102, Bucket 682

Rim diam.: 12; Max h.: 55.5

Flared and ledged at outer edge rim, short neck, rounded shoulder, ribbed body, rounded base, two loophandles attached from shoulder to body. Reddish-yellow ware (5YR6/6), many small black grits, hard fired.

621 Jar

Reg. No. C/61/B406; Area C, Sq. CC100, Bucket 406

Rim diam.: 11; Max h.: 5.5

Flared and ledged at outer edge rim, short neck. Reddish-yellow ware (5YR6/6), many small black grits, medium fired.

622 Jar

Reg. No. C/61/B403; Area C, Sq. DD101, Bucket 403

Rim diam.: 10; Max h.: 5.5

Flared and ledged at outer edge rim, short neck. Yellowish-red ware (5YR5/6) and gray core (5YR5/1), hard fired.

623 Jar

Reg. No. C/61/B465; Area C, Sq. CC100, Bucket 465

Rim diam.: 10; Max h.: 5.3

Flared and ledged at outer edge rim, short neck ridged at junction with rounded shoulder. Yellowish-red ware (5YR5/6), many small white grits, hard fired.

Bell-shaped Jars with Projecting Rim (Nos. 624–634)

High steep neck, heavy and pronounced ledge on external lip. Bell-shaped body and rounded base.

Even though a huge number of such rim sherds were found in Jaffa, mainly in the Area C dwelling house, this type of ledge rim jar is not popular at Judean sites or elsewhere in Israel. One complete jar was recovered on the floor of the dwelling house in Area C (next to the ledged rim jar no. 620) (Kaplan 1964:8, fig 1:3). An identical jar rim from Herodium was defined as belonging to the “Bell-Shaped Family” (Bar-Nathan 1981:56, pl. 3:5). At Masada, the type was divided into two subtypes: with a bag-shaped body (Bar-Nathan 2006, pl. 12–13:62–71) and a bell-shaped body (Bar-Nathan 2006, pl. 12–13:67–71). The Jaffa examples can be divided into two subtypes.

A. Triangular Projecting Rim (624–632)

B. Shelf Rim (633–634)

The two subtypes were very popular in the Judean region and were recovered from almost every site. In Jerusalem, a similar single ledged lip jar was recovered dated to the mid-1st century CE (Tushingham 1985:373, fig. 21:34). Additional examples were found at the Desert Caves and can be connected to the post-destruction period or the Bar Kochba Revolt. Examples were found in Wadi ed Daliyeh (Lapp and Lapp 1974:52, pl. 26:10), Nahal Hever (Aharoni 1964, fig. 7:27–29), Rock Cave (Eshel and Amit 1998:195–6, fig. 3:42–54), Cave of Horror (Aharoni 1962, fig. 3:5) and Cave of the Letters (Yadin 1963:120, fig. 43:4.5). Others appeared in ‘En Boqeq (Fischer and Tal 2000:36–37, fig. 2.6:30–38) and En-Gedi (Hershkovitz 2007:456, fig. 2:9). At Ramat Hanadiv an identical jar was treated as part of the “common Palestinian bag-shaped jars” that appeared in the late 1st century and continued until the 6th century CE (Silberstein 2000:421, fig. 1:21).

Date range: 1st – late 2nd cent. CE

624 Jar

Reg. No. 79/C/61/451; Area C, Sq. DD102, Bucket 676

Rim diam.: 11; Max h.: 49

Flaring rounded rim, short neck, ridge above shoulder, rounded base, two loop handles from shoulder to body. Dark red ware (2.5YR4/6), many small white grits, hard fired.

625 Jar

Reg. No. C/61/B694.2; Area C, Bucket 694

Rim diam.: 10; Max h.: 9.2

Ledged rim, high neck, ribbed shoulder. Dark red ware (2.5YR4/6) and dusky red core (2.5YR3/2), many small white and black grits, hard fired.

626 Jar

Reg. No. C/61/B594.1; Area C, Sq. DD102, Locus 432, Bucket 594

Rim diam.: 10; Max h.: 6.5

Ledged rim, high neck. Light reddish-brown ware (5YR6/4) and gray core (5YR5/1), many small white grits, hard fired.

627 Jar

Reg. No. C/61/B591.2; Area C, Sq. DD101, Locus 429, Bucket 591

Rim diam.: 10; Max h.: 6

Ledged rim, high neck. Reddish-yellow external ware (5YR6/6) and dark gray internal ware (5YR4/1), brown core (7.5YR5/4), hard fired.

628 Jar

Reg. No. C/61/B328.1; Area C, Sq. DD102, Bucket 328

Rim diam.: 13; Max h.: 6

Ledged rim, high neck. Weak red ware (2.5YR6/4) and yellowish-red core (5YR5/8), many medium white grits, hard fired.

629 Jar

Reg. No. C/61/B233.1; Area C, Sq. DD102, Locus 416, Bucket 233

Rim diam.: 8; Max h.: 4.5

Ledged rim, high neck. Pink ware (5YR7/4) and light reddish-brown core (5YR6/4), many small white grits, hard fired.

630 Jar

Reg. No. C/61/B281.4; Area C, Sq. DD102, Bucket 281

Rim diam.: 11; Max h.: 5.5

Ledged rim, high neck. Pink ware (5YR7/4) and brownish yellow core (10YR6/6), many small white grits, hard fired.

631 Jar

Reg. No. C/61/B281.3; Area C, Sq. DD102, Bucket 281

Rim diam.: 11; Max h.: 5

Ledged rim, high neck. Pink ware (7.5YR 7/4) and dark gray core (7.5YR4/1), many minute white grits, hard fired.

632 Jar

Reg. No. C/61/B253.1; Area C, Sq. DD102, Bucket 253

Rim diam.: 11.5; Max h.: 6

Ledged rim, high neck. Light brown ware (7.5YR6/4) and brown core (7.5YR4/4), a few medium white grits, few small black and red grits, a few large brown grits, hard fired.

633 Jar

Reg. No. C/61/B655; Area C, Sq. DD101, Locus 429, Bucket 655

Rim diam.: 9; Max h.: 5.5

Thick flattened rim, medium neck, ridged at junction with shoulder. Reddish-brown ware (5YR5/3) and yellowish-red core (5YR4/6), many small and medium white grits, medium fired.

634 Jar

Reg. No. C/61/B230.2; Area C, Sq. DD102, Locus 416, Bucket 230

Rim diam.: 11.5; Max h.: 3.5

Thick flattened rim, medium neck, ridged at junction with shoulder. Light reddish-brown ware (5YR6/4) and very dark gray core (5YR3/1), hard fired.

Bell-shaped Jars with Plain Rim (Nos. 635–637)

Thickened rim, very high cylindrical neck, broad shoulder and bell-shaped body.

In Jaffa, a single complete jar was found in the dwelling house in Area C that is probably connected to the complete ledged rim jar type.

Like the former types, the bell-shaped jar can be considered a Judean form. Unlike the former type, its distribution was limited to Herodian sites in the southern part of Israel. At Masada, a similar jar appeared in Herodian and Zealot contexts (Bar-Nathan 2006:59–60, pl. 9:49). At Bethany and Qumran, a similar bell-shaped jar with flared neck was dated from the mid-1st century BCE to the mid-1st century CE (Lapp 1961:144, Type 11.1c). In Jerusalem, two rim fragments seem to be similar to the type dated to post-70 CE (Tushingham 1985, fig. 25:30–31). At Herodium, a group of unparalleled small jars with a bell-shaped body and various thickened rim shapes were published. One complete jar, similar to the Jaffa example, was found at the bottom of the pool in the northern wing dated to the 1st century CE (Bar-Nathan 1981:57–8, fig. 9:2). The type can be connected to the Bar Kokhba Revolt base on its appearance in Wadi ed Dalieh (Lapp and Lapp 1974:52, pls. 24:4–5, 26:1–2) and in the Wadi Murabba'at cave (De Vaux 1961:257, fig. 3:1).

Date range: 1st cent. CE

635 Jar

Reg. No. 79/C/61/448; Area C, Sq. DD101, Locus 428, Bucket 543

Rim diam.: 10; Max h.: 43.5

Flaring rounded rim, high neck, rounded shoulder, rounded base, two loop handles from shoulder to body.

Pink ware (10YR7/4), many small white and black grits, hard fired.

636 Jar

Reg. No. C/61/B518; Area C, Sq. DD102, Bucket 518

Rim diam.: 8; Max h.: 6.5

Flaring rounded rim, high neck. Pink ware (7.5YR7/4), hard fired.

637 Jar

Reg. No. C/61/B405; Area C, Sq. CC100, Bucket 405

Rim diam.: 12; Max h.: 5.5

Flaring rounded rim, high neck. Very pale brown ware (10YR7/4) and grayish-brown core (10YR5/2), hard fired.

Outfolded Rim Jars (Nos. 638–642)

High neck with tiny ridge at bottom, outfolded rim, relatively leaning shoulders. The fabric is hard and thinner (with the metallic ring) than that of the former bag-shaped jar even though they were part of the same bag-shaped tradition.

The type is very common in the Judean caves and many of them were discovered in the Cave of Horror (Aharoni 1962, fig. 3:4) and in Wadi ed Dalieh (Lapp and Lapp 1974, pl. 27:12). Further examples appeared in Jericho (Bar-Nathan 2002:155, pl. 24:418), Machaerus (Loffreda 1996:52 fig. 18:9–34), Masada (Bar-Nathan 2006 pl. 16:101–103) and Herodium (Bar-Nathan 1981:56, pls. 3:14, 10:6). The type was dated from the 1st to the 2nd century CE.

In Jaffa, one complete jar was found (638) and several other examples in the dwelling house in Area C. The Jaffa examples were made of the typical hard fired ware with a metallic appearance so typical of the Judean region. They probably were of Judean origin and were brought to Jaffa by the Jewish inhabitants in Area C.

Date range: 1st – mid-2nd cents. CE

638 Jar

Reg. No. 79/C/61/453; Area C, Sq. DD101, Locus 428, Bucket 535

Rim diam.: 10.5; Max h.: 54.5

Inverted rounded rim, short neck, rounded shoulder, rounded base, two loop handles from shoulder to body. light brown ware (7.5YR6/4), hard fired.

639 Jar

Reg. No. 79/C/61/439; Area C, Sq. DD101, Locus 428, Bucket 550

Rim diam.: 9; Max h.: 20.5

Thick folded rim, narrow high neck ridged at junction with shoulder. Narrow ribbed shoulder and bag shaped body. Pinkish-gray ware (7.5YR7/2) and brown core (7.5YR5/2), many small white and black grits, hard fired.

640 Jar

Reg. No. C/61/B687; Area C, Bucket 687

Rim diam.: 8.7; Max h.: 9.5

Reddish-yellow ware (7.5YR7/6), gray core (2.5YR 5/1), many small white grits, hard fired.

641 Jar

Reg. No. C/61/B295; Area C, Sq. DD100, Bucket 295

Rim diam.: 10; Max h.: 5.6

Thick folded rim, high neck ridged at junction with rounded shoulder. Reddish-yellow ware (5YR6/6), many minute white grits, hard fired.

642 Jar

Reg. No. C/61/B665; Area C, Sq. DD101, Locus 429, Bucket 665

Rim diam.: 11; Max h.: 7

Flared and ledged at outer edge rim, short neck ridged at junction with rounded shoulder. Reddish-yellow ware (5YR6/6), many minute white grits, hard fired.

Inward Sloping Rim Jars (No. 643)

Inward sloping rim, high neck and bag-shaped body.

In Jaffa, many rim fragments were found within the Roman pool in Area A that can be dated from the 2nd until the 7th century CE. The type is rather rare and was recovered recently in En-Gedi. It seems reasonable to accept Hershkovitz dating of the type to the post-destruction period or more precisely the Bar Kochba Revolt (133–135 CE) (Hershkovitz 2007:456, fig. 1:6–8).

Date range: 2nd cent. CE

643 Jar

Reg. No. A/73/L752.4; Area A, Locus 752

Rim diam.: 10.5; Max h.: 5

Diagonal cut inward rim, high neck ridged at low end. Reddish-yellow ware (5YR6/6) and dark gray core (5YR4/1), hard fired.

9.4.4. Late Roman–Byzantine Jars

Bag-shaped Jars

During the Middle and Late Roman period and until the Late Byzantine period the distribution of the bag-shaped jar increased in number and variety, and it became widespread throughout Israel.

The form preserves the typical bag-shaped body with sharp ribbing. The rim is usually thick and the neck length varies from high to average height. In the early versions a tiny ridge connected the neck to the shoulder. Two loop handles are attached from the broad shoulder to the body. The fabric varies from sandy buff to reddish-orange. The poor quality of the sandy ware raised the question about the function of the jar. The uncoated fabric seems suitable for storing water. The existence of that type of jar in the Athenian Agora can be a good argument the original function of the Palestinian bag-shaped jars as wine containers (Robinson 1959:68, pl. 15:K108). In the Athenian Agora, the type was dated to the mid-3rd century CE. Peacock and Williams defined the type as the “Palestinian Jar” dated to the 5th–6th centuries CE (Peacock and Williams 1986:191–2, fig. 110). This classification is questionable and not precise. The type was defined as being of local origin and was classified, according to fragments from the Caesarea Hippodrome, to five chronological subtypes, dated from the 2nd to the 7th century CE (Riley 1975, Type 1a, 1b, 1c, 1x, 1y).

The Roman bag-shaped jar is most common in Jaffa. It appeared almost exclusively in the Area C dwelling house (except for no. 652). The jar is shape and ware seem identical to those in the Caesarea repertoire,

but cannot be classified totally according to Riley's typology. In addition, the Jaffa jars lack drilled holes on the body wall that were explained by Adan-Bayewitz as the means to allow gases to escape from the wine fermenting in the jar (Adan-Bayewitz 1986:92–5).

The Jaffa assemblage can be divided into the following subtypes.

A. High Ridged Neck (Riley Type 1a) (Nos. 644–655)

Thickened outward or inward folded rim, high neck ridged at bottom or at connection with shoulder, ribbed shoulder and bag-shaped body.

In Jaffa, a large assemblage of complete jars was recovered in the dwelling house in Area C, a few jars were found in the “first pit” (square DD102–CC102) (649, 657), and another one was found at floor level (Locus 428) (651).

The Caesarea excavated deposits can be an excellent database for understanding the typological development of Type 1a. Riley suggested that Type 1a was developed between the 2nd century BCE and the 1st century CE (Jaffa's collared rim jar, ledged and ridged jar types), and changed mainly in its neck height, which decreased through time. The type can be dated from the 2nd to the 4th century CE (Riley 1975:26, 29, nos. 8–9). In addition, in the Caesarea Promontory Palace a large assemblage of jars was found dated to the 2nd–3rd centuries CE, which contributes to the understanding of Type 1a development from the 1st century onward (Bar-Nathan and Adato 1986:163, fig. 2:1–9).

The Jaffa Type 1a examples can be divided into three subtypes.

1a1. High Ridged Neck (644–646) (Riley 1a; Bar-Nathan Variant B–C). Dated to 2nd–4th century CE.

1a2. Low Ridged Neck (647–652) (Riley 1a/b; Bar-Nathan Variant A). Dated to 2nd–5th/early 6th century CE.

1a3. Outfold rim (653–655). Dated from the late 6th to the early 7th century CE.

The first two subtypes appeared simultaneously during the 2nd–4th century in Caesarea (Oleson 1994:17, fig. 4:A20–A21; Peleg and Reich 1992:154, fig. 14:7–12, 20; 15:11–12). Type 1a2 continued until the late 4th and early 5th century CE in the inner harbor and in a Late Byzantine building in Caesarea (Tomber 1999:302, 313, fig. 4:79, 81; Adan-Bayewitz 1986:91, fig. 1:3). This evidence can delay Type 1a to the 5th century CE. Throughout the Coastal Plain the type was found in 2nd–4th century contexts in Shiqmona (El-gavish 1977:24–5, pl. xix:152–4), Ramat Hanadiv (Silberstein 2000:421, fig. 1:16–23; Calderon 2000:91–92, pl. 1:1–8) and Kh. Ibreyktas (Kletter and Rapnano 1998:50, fig. 4:1–5).

Jars similar to Type 1a2 were recovered in Rehovot in the Negev and in northern Hammat Gader, both in 6th–7th century contexts (Rosenthal-Heginbottom 1988:84, pl. II:59,90; Ben Arie 1997:373, fig. xiii:3). However, they lack the ridged neck and their sandy buff ware seems different and was probably made at other workshops during the Byzantine period. In Jerusalem, a single rim fragment dated to the 6th–7th centuries CE seems identical (Magness 1992a:180, fig. 10:12). At Sumaqa, an identical Byzantine assemblage of rim fragments was found made of soft powdery texture ware (Kingsley 1999:269–270, fig. 10:1–13). Similar examples were found in Capernaum, dated to the Mid-Late Roman period (Loffreda 1974:26–27, fig. 1:3)

Type 1a3, which was rare in Jaffa, appeared during the late 6th–7th centuries in Jerusalem (Tushingham 1985:95, fig. 30:29, 42).

644 Jar

Reg. No. C/61/B694.1; Area C, Bucket 694

Rim diam.: 9; Max h.: 10

Thickened rim, high neck ridged at low end, deeply ribbed shoulder. Reddish-yellow ware (5YR6/6) and dark gray core (5YR4/1), many small and medium white grits, many minute quartz grits, hard fired.

645 Jar

Reg. No. C/61/B132.1; Area C, Sq. DD100, Locus 414, Bucket 132

Rim diam.: 9.5; Max h.: 7

Thickened rim, high neck ridged at low end, deeply ribbed shoulder. Reddish-yellow ware (5YR6/6; 7/6), many small and medium white grits, many minute black grits, hard fired.

646 Jar

Reg. No. C/61/B195.1; Area C, Sq. DD100, Locus 414, Bucket 195

Rim diam.: 9.5; Max h.: 8

Thickened rim, high neck ridged at low end, deeply ribbed shoulder. Reddish-yellow ware (5YR6/6;7/6), many small and medium white grits, many small black grits, hard fired.

647 Jar

Reg. No. 79/C/61/449; Area C, Sq. DD101, Locus 428, Bucket 557

Rim diam.: 9.5; Max h.: 49

Vertical sharp rim, short neck, rounded shoulder, rounded base, two loop handles from shoulder to body. Dark red ware (2.5YR4/8), hard fired.

648 Jar

Reg. No. 79/C/61/437; Area C

Rim diam.: 10; Max h.: 20

Outcurved rounded rim, short neck, rounded shoulder, ribbed body, two vertical handles on the shoulder. Red ware (2.5YR5/6), many small white and black grits, hard fired.

649 Jar

Reg. No. 79/C/61/441; Area C, Bucket 694

Rim diam.: 9.5; Max h.: 39

Flaring rim, short neck, ribbed body, rounded base, two handles from shoulder to body. Dark red ware (2.5YR4/6) and reddish-brown core (5YR4/3), many small white and quartz grits, hard fired.

650 Jar

Reg. No. 79/C/61/446; Area C

Rim diam.: 10.5; Max h.: 42.5

Flattened rim, short neck, ribbed body, rounded base. Dark red ware (2.5YR4/6) and reddish-brown core (5YR4/3), many small white and quartz grits, hard fired.

651 Jar

Reg. No. 79/C/61/450; Area C, Sq. DD101, Locus 428, Bucket 556

Rim diam.: 9.5; Max h.: 48.5

Inverted rounded rim, short neck, rounded shoulder, rounded base, two loop handles from shoulder to body. Dark red ware (2.5YR4/8), hard fired.

652 Jar

Reg. No. A/73/B578; Area A, Locus 752, Bucket 578

Ribbed Body with two loop handles attached to shoulder, red painted strip on lower part of wall.

Reddish-yellow ware (5YR6/6), many small white and gray grits, hard fired.

653 Jar

Reg. No. C/61/B689; Area C, Sqs. DD102–CC102, Bucket 689

Rim diam.: 11; Max h.: 5

Outfolded rim, high neck ridged on lower part. Reddish-yellow ware (5YR6/6), many medium white grits, hard fired.

654 Jar

Reg. No. C/61/B688.1; Area C, Sqs. DD102–CC102, Bucket 688

Rim diam.: 10; Max h.: 3.8

Outfolded rim, high neck ridged on lower part. Reddish-yellow ware (5YR6/6), many small white grits, hard fired.

655 Jar

Reg. No. A/72/B114.1; Area A, Sq. K4, Bucket 114

Rim diam.: 11.4; Max h.: 3.7

Thick everted rim. Yellowish-red ware (5YR5/6) and dark gray core (5YR4/1), many small white grits, hard fired.

B. Low Neck (Riley Type 1b) (Nos. 656–657)

Plain rim, low and thicker neck, ribbing on shoulder. The body is more cylindrical than bag-shaped.

In Jaffa, a complete jar was found in the dwelling house in Area C and a single rim fragment, probably due to the general lack of Byzantine pottery in that area. Riley assigned the type to the Byzantine period:

“during the fifth century the rim became lower and the fabric less crisp” (Riley 1975:26). At Rehovot in the Negev similar jars were dated to the 6th–7th centuries CE (Rosenthal-Heginbottom 1988:84, pl. II:27, 55). At Caesarea, this type was found in all excavated sites according to published deposits. In a Late Byzantine building in Caesarea the type comprised 39% of the jars (Adan-Bayewitz 1986:97, fig 1:4–7; Peleg and Reich 1992:154, fig. 13:14–18). In the eastern Hippodrome, Type 1b comprised 64% of the amphoras at the Byzantine level (Riley 1975:26–7). At Sumaqa, the type comprised 65.3% of the total pottery and 96.8% of the local jars at the site (Kingsley 1999:264, 269, fig. 10:1–13).

Date range: 5th–early 7th cents. CE

656 Jar

Reg. No. C/61/B326.1; Area C, Sq. DD102, Bucket 326

Rim diam.: 15; Max h.: 13.5

Out folded rim. Dark red ware (2.5YR4/6) and red core (2.5YR5/6), hard fired.

657 Jar

Reg. No. 79/C/61/452; Area C, Sqs. DD102–CC102, Bucket 695

Max h.: 42

Rounded shoulder, ribbed body, rounded base, two loop handles from shoulder to body. Dark red ware (2.5YR4/6) and red core (2.5YR5/6), hard fired.

C. Ribbed Shoulder (Riley type 1c) (No. 658)

Pointed rim, low and heavy neck, combed decoration on shoulder.

In Jaffa, a single rim was found in the Area C dwelling house, which was recovered like the other Type 1b fragments from the Byzantine occupation level.

Date range: Byzantine

658 Jar

Reg. No. C/61/B63; Area C, Sq. CC101, Locus 406, Bucket 63

Rim diam.: 9.5; Max h.: 5

Pointed rim, low thick neck, combed decoration on shoulder. Reddish-yellow ware (5YR6/6), a few minute black grits, hard fired.

The wide distribution of the bag-shaped jar (Riley Types 1a–1c) at northern and central Byzantine sites suggests local workshops in a number of locations throughout Israel. At northern sites such as Jalame (Johnson 1988:214–219, nos. 798–809), Khirbet Shema (Meyers et al. 1976, pl. 7.21 no. 28), Meiron (Meyers et al 1981:60–68) and even Pella (McNicoll, Smith and Hennessy 1992:140, pl. 92.4) the type was most common during the 4th–5th century CE. A kiln at Horvat ‘Uza in the eastern Akko Valley dated from 350–400 CE produced Type 1b jars (Getzov 1993:20; Avshalom-Gorni 2009:53 fig. 2.37:4–6). At Tel Keisan, a similar type comprises 40% of the total number of jars at the site (Landgraf 1980:69, Table 8a). Petrographic examination of Tel Keisan sherds suggested the Late Byzantine kiln in Khirbet Aiyadiya as the source for the red bag-shaped jar (Landgraf 1980:78).

The north fabric is different from the Jaffa examples and other Coastal Plain jars. According to the distribution pattern, it is now reasonable to conclude that the jars found along the shore were manufactured during the 2nd–7th century CE at the local workshops, probably in the Sharon region.

Unclassified Bag-shaped Jars (No. 659)

Flared rim and neck with deep ribbing at lower part. In Area C, a single rim was recovered, which has no parallels.

659 Jar

Reg. No. C/61/B80.1; Area C, Bucket 80

Rim diam.: 10; Max h.: 9

Thick and flared rim, ribbed and flared neck. Weak red ware (2.5YR5/4) and red core (2.5YR5/6), a few small white grits, medium fired.

Gaza Jars

Short knobbed rim, narrow shoulder with remnants of leftover clay on shoulder and around rim, cylindrical sharply ribbed body, two ring handles crudely formed, attached from shoulder to body. The fabric is thick and not homogeneous, ranging from brown (5YR 5/6) to grayish (10YR 5/1).

The Gaza jar was the second most common jar in Israeli assemblages after the bag-shaped jar.⁶⁵ The Gaza jar was the container for the famous Gaza and Ashkelon wine and was found throughout the Mediterranean and the Black Sea regions with a significant concentration in southern Israel based on the fact that Byzantine authors praised the wines of Gaza and Ashkelon. Petrographic analysis of the Caesarea Hippodrome fragments made by Peacock proved that Gaza was the place of origin (Riley 1975:29–31; Zemer 1977:61; Egloff 1977:117, Types 182–3). The suggestion concerning the evidence from Kassariw in the northern Sinai Peninsula that the Gaza jar contained pickled fish was rejected by several scholars (Sperber 1976; Adan-Bayewitz 1986:99). The Gaza jars were manufactured in southern Coastal Plain, probably around Gaza and Ashkelon. Five kilns were found in the “Third Mile” estate in Ashkelon that produced both Gaza types in the same agricultural estate (Israel 1995). Additional pottery kilns were uncovered in Khirbet Baraqa (Gadot and Tepper 2003:130–154) and Yavne (Yannai 2012:94–103). Both complexes were dated to the end of the Byzantine period. The Yavne workshop destruction was related by the excavator to the 654 earthquake (Yannai 2012:103). The distribution pattern points toward concentration mainly in south and central Israel.⁶⁶

Gaza jars can be divided into three subtypes.

Ashkelon Type – 2nd–3rd cents.

Short Type – Late Roman to Byzantine

Tall Type – Byzantine

In Jaffa, the evidence is scattered and minimally, due to the fact that Jaffa’s chronological context is relatively earlier in accordance to the Gaza jar flourish era.

In Jaffa, evidence was found of two subtypes.

A. Ashkelon Type (Nos. 660–664)

Plain rim, high neck, ridged at bottom, broad shoulder, cylindrical body.

The type is rather rare in Israel. In Jaffa, a complete jar was found in the graves in Area T dated to the Late Roman period.

Date range: 2nd–3rd cents. CE

660 Jar

Reg. No. 79/T/61/052; Area T

Rim diam.: 10; Max h.: 61

Thick plain rim, high neck ridged at junction with broad shoulder, cylindrical body slightly ribbed, with pointed base. Two loop handles attached from shoulder to wall. Weak red ware (2.5YR6/3), hard fired.

661 Jar

Reg. No. C/61/B345; Area C, Sq. DD102, Bucket 345

Rim diam.: 10.5; Max h.: 3.4

Plain rim, low and turned inward neck ridged at junction with shoulder. Light brown ware (7.5YR6/3), few minute black grits, a few minute silver mica grits, hard fired.

⁶⁵ Rosenthal-Heginbottom 1988:86. In the Hippodrome at Caesarea the bag-shaped type comprised 64% of the total common forms, while at Rehovot–in–the–Negev it comprised 63%.

⁶⁶ See Johnson 2006:549 and n. 163 for full references for the tall type distribution.

662 Jar

Reg. No. C/61/B592.2; Area C, Sq. DD102, Locus 432, Bucket 383

Rim diam.: 9; Max h.: 4

Plain rim, low neck ridged at junction with shoulder. Light brown ware (7.5YR6/3;6/4), a few minute black grits, hard fired.

663 Jar

Reg. No. C/65/622; Area C, Sq. CC103, Locus 456, Bucket 1028

Rim diam.: 10; Max h.: 17.5

Thick rim, broad ribbed shoulder and cylindrical ribbed body. Yellowish-red ware (5YR5/6) and yellowish-red core (5YR4/6), many small white and black grits, medium fired.

664 Jar

Reg. No. 79/G/64/055; Area G, Sq. 25, Bucket 62,65

Rim diam.: 8.1; Max h.: 24

Thick uprised rim, broad ribbed shoulder and cylindrical lightly ribbed body. Two small twisted handles attached from shoulder to body. Weak red ware (2.5YR6/3), many medium white grits, soft fired.

B. The Short Type (Nos. 665–667)

Everted rim, relatively broad ribbed shoulder, cylindrical body.

It is called “Ashkelon Type B” jar (Johnson and Stager 1995:98). Peacock and Williams classified the type as Form 48, dated to the 3rd–4th century CE, a precursor of the traditional long body Gaza jar, Form 49 (Peacock and Williams 1986:196–7). The type is familiar in the Israel repertoire, however not of the same quantity as the later Gaza jar that reached its peak in the Byzantine period. Its distribution was concentrated mainly along the Coastal Plain. At Caesarea, the type appeared in 3rd–5th century contexts (Oleson 1994:108, fig. 34:A63; Tomber 1999:313, fig. 4:73–75; Peleg and Reich 1992:154, fig. 15:13; Riley 1975:27–8, fig. 32:14–15). A complete jar was recovered from a Roman well in Khirbet Ibreyktas near Hadera dated to the 3rd–4th century (Kletter and Rapuano 1998:49–50, fig. 3:5). At Sumaqa, only the short type was recovered and in surprisingly small quantities. They comprise only 1.5% of the local jars at the site (Kingsely 1999:268, fig. 11:47–48). A few examples were found at the distant northern site of Jalame dated to the late 4th century CE (Johnson 1988:211–2, fig. 7–50:734). At Rehovot in the Negev the jar appeared during the Byzantine period and comprised 28% of the total common forms at the site (Rosenthal-Heginbottom 1988:84, pl. II:96–124).

Date range: 3rd–5th cents. CE

665 Jar

Reg. No. C/61/B232; Area C, Sq. CC101, Bucket 232

Rim diam.: 9; Max h.: 5

Thick uprised rim, broad ribbed shoulder. Strong brown ware (7.5YR5/6), hard fired.

666 Jar

Reg. No. C/61/B214; Area C, Sq. DD100, Bucket 214

Rim diam.: 10; Max h.: 5.2

Thick uprised rim, broad sharply ribbed shoulder. Reddish-yellow ware (7.5YR6/6), many small black grits, hard fired.

667 Jar

Reg. No. C/61/B128.1; Area C, Sq. DD100, Locus 414, Bucket 128

Rim diam.: 10; Max h.: 6

Thick uprised rim, broad ribbed shoulder. Reddish-yellow ware (5YR6/6), many minute black grits, hard fired.

9.5. Stoppers and Amphora Lids

The stoppers served as amphora sealing devices during the transportation or storage of the merchandise. They were made of various organic and inorganic materials including clay (Peacock and Williams 1986; Bar-Nathan 2006:214). The clay stopper was used particularly in the west and was connected with Hellenistic and Early Roman wine amphoras from Italy and the Aegean Sea. In the south stoa in Corinth, for example, an assemblage of Knidian and Rhodian amphoras was recovered with closed lids sealed with clay or wax (Broneer 1930:240, pl. VIII:10).

In Jaffa, a rich repertoire of Amphora lids or stoppers was recovered. The assemblage is rather unique in comparison to other finds in Israel and closest to the form recovered in the Judean region, particularly in Masada (Bar-Nathan 2006:214–224). The repertoire can be divided into the following types.

9.5.1. Lids (Nos. 668–670)

Knobbed handle, thickened discus shaped body. The clay is medium fired and probably containing pozzolana. Three lids were found in the dwelling house in Area C. Two examples are decorated on their upper part with molded unidentified letters (668–669), and the third one is without any inscriptions (670). At Masada, 53 similar complete lids were divided according to their decoration into five subtypes, all dated to the 1st century CE (66–73/4 CE) (Bar-Nathan 2006:215–219, pls. 36:1–14; 37:15–29). The type was identified as Italic wine Amphora Dressel 2–4 stopper lids. The lid was sealed on top with pozzolana mortar. The merchant who supplied the amphoras impressed the letters on the mortar (Peacock and Williams 1986:11–12; Bar-Nathan 2006:215). Similar stoppers without an inscription were found in the Hellenistic context in Samaria (Reisner et al. 1924, pl. 68:C, F) and at Benghazi at the Early Roman level (Riley 1979:177, fig. 81; 213).

Date range: 1st cent. CE

668 Stopper

Reg. No. 79/C/61/376; Area C, Bucket 545

Rim diam.: 10; Max h.: 3

Slightly concaved wall with hickened edge, button handle on center of top. Latin letters round handle. Pale red ware (2.5Y7/3;7/4), a few large red grits, hard fired.

669 Stopper

Reg. No. 79/C/61/375; Area C, Sq. DD101, Locus 429, Bucket 671

Rim diam.: 9.7; Max h.: 3

Slightly concaved wall with hickened edge, button handle on center of top. Remains of mold decoration on top. Pale red ware (2.5Y7/3;7/4), many small black grits, hard fired.

670 Stopper

Reg. No. 79/C/65/555; Area C, Locus 441, Bucket 889

Rim diam.: 9.5; Max h.: 2

Rounded discus with central knobbed handle. Very pale brown ware (10YR7/3), hard fired.

9.5.2. Small Lids (Nos. 671–677)

Conical to flattened discus shaped body with raised or flattened edge. Three distinguished subtypes can be defined.

A. Knobbed Handle (Nos. 671–673)

The knobbed-handled subtype is the most common. It was in use in the late 2nd century BCE in Paphos as the Hellenistic Amphora Dressel 6 stopper (Hayes 1991:141, fig. 47:134). During the mid-3rd century CE the type appeared in the Athenian Agora (Robinson 1959:67, pl. 14: K86–7; 69, pl. 14:K119). In Benghazi, the stopper appeared most frequently in the Early and Mid-Roman period and was classified as belonging to

Type 1c cooking lid, which was originally manufactured at Tocra but also appeared in a Late Roman context (Riley 1979:321, fig. 119:764; 365, fig. 131:1050).

In Israel, the amphora lids are rather rare. At Masada, four fragments were recovered dated to the Early Roman period (73/74–80/87? CE) (Bar-Nathan 2006:219, pl. 37:26–27). Like the former type, they were identified as amphora stoppers. At Dor, several examples were found dated from the late Persian to the Hellenistic period (Guz-Zilberstein 1995:302, fig. 6.24:2–3).

Date range: late 2nd cent. BCE – mid-3rd cent. CE

671 Stopper

Reg. No. 79/A/56/179; Area A, Sq. I9

Rim diam.: 10.5; Max h.: 2.9

Knobbed handle, concaved wall with curved upward edge. Weak red ware (2.5YR6/4), many small quartz grits, hard fired.

672 Stopper

Reg. No. 79/C/61/380; Area C, Bucket 148

Rim diam.: 8; Max h.: 2.8

Hollow pyramidal handle, concaved wall with curved inward edge. Weak red ware (2.5Y6/2; 6/3), many small and large white grits, hard fired.

673 Stopper

Reg. No. 79/C/61/377; Area C, Sq. DD100, Bucket 109

Rim diam.: 8.5; Max h.: 3

Hollow knobbed rim, concaved wall curved upward at rim. Very pale brown ware (10YR7/4), many big white and black grits, hard fired.

B. Flat Handle (Nos. 674–676)

The flat “string cut” handle lids have no parallels. Their context in Area A dates them to the Hellenistic period.

674 Stopper

Reg. No. 79/A/70/130; Area A, Sqs. J3–K3 Locus: Bucket 146

Rim diam.: 10; Max h.: 3

Flat “string cut” handle, sloping wall. Light brown ware (7.5YR6/3), hard fired.

675 Stopper

Reg. No. 79/A/58/098; Area A, Sq. H7

Rim diam.: 7.8; Base diam.: 3.9; Max h.: 4.3

Flat handle, narrow wall with incurved edge. Yellowish slip. Very pale brown ware (10YR8/3), hard fired.

676 Stopper

Reg. No. 79/A/55/104; Area A

Rim diam.: 7; Max h.: 1.5

Flat handle, sloping wall with outcurved edge. Whitish slip. Very pale brown ware (10YR8/3) and reddish-yellow core (5YR6/6), hard fired.

C. Pyramidal Shape (No. 677)

The third type with a pyramidal profile was found in the Athenian Agora and dated from the 1st/early 2nd to the mid-3rd centuries CE (Robinson 1959:33, pl. 6:G109; 67, pl. 14:K87).

Date range: 1st to mid-3rd cents. CE

677 Stopper

Reg. No. 79/C/61/379; Area C, Sq. DD101, Locus 439, Bucket 553

Rim diam.: 7; Max h.: 2.5

Hollow rising handle, pyramidal wall. Pale brown ware (10YR6/3), a few large white and many large black grits, hard fired.

9.5.3. Disc-Shaped (Nos. 678–680)

Small discus, probably a reused sherd.

It was used for sealing amphorae like the former types. Based on an intact plugged jar rim found at Masada, a ball-shaped lump of clay or a piece of cork or wood was inserted between the neck and the body. It was then covered with wet lime mortar, the disc-shaped lid, and a final layer of mortar (Bar-Nathan 2006:216, fig. 72).

In Jaffa, three examples were recovered.

The lid is characterized by a rounded section that forms an external ring (678) has no parallels. It was recovered from Byzantine Locus 414 beside the rouletted bowl dated to the Late Byzantine period (112).

The two others are characterized by a flat section, and uneven sides and smooth surface (679–680). The Masada example identical to it was dated to 66–74 CE (Bar-Nathan 2006:216, fig. 72). Unidentical stoppers with ribbed surface were recovered from Byzantine contexts in Caesarea (Peleg and Reich 1992:148, fig 14:16; Magness 1992b:149, fig. 65:8) and Rehovot in the Negev (Rosenthal-Heginbottom 1988, pl. V:230).

Date range: Roman–Byzantine

678 Stopper

Reg. No. 79/C/61/381; Area C, Sq. DD100, Locus 414, Bucket 121

Rim diam.: 4.7; Max h.: 1

Small discus with rounded edge. Brownish yellow ware (10YR6/6), hard fired.

679 Stopper

Reg. No. A/71/B144.1; Area A, Sq. I3, Bucket 144

Rim diam.: 5; Max h.: 7

Small discus. Weak red ware (2.5YR5/4), hard fired.

680 Stopper

Reg. No. 79/A/73/021; Area A, Sq. H101, Bucket 157

Rim diam.: 4.5; Max h.: 1

Small discus. Reddish-brown ware (5YR5/3), hard fired.

9.5.4. Perfume Stoppers (Nos. 681–682)

A small lump of ovoid-shaped fired clay. The method of sealing and plugging with wet clay is well known in the eastern Mediterranean since the Late Bronze Age (Zemer 1977:89–90).

However, the Jaffa examples, which were found in Area C (681) and Area Y (682), were made of well fired clay. No identical examples were found. The most similar type is the solid cross-shaped stopper, which was popular mainly in Judea during the Herodian Period, probably as an unguentaria stopper (Bar-Nathan 2006:217, pl. 37:42–44). The Jaffa example most likely served also as a seal for a perfume bottle. The third example (683) was made of low fired crumbly ware and lacks any parallels.

Date range: Early Roman

681 Stopper

Reg. No. C/61/621; Area C, Bucket 662

Max h.: 4

Solid drop shaped stopper. Red ware (2.5YR6/6), hard fired.

682 Stopper

Reg. No. 79/Y/68/250; Area Y, Sq. Y13, Locus L7, Bucket 52

Max w.: 3.2 Length max: 4

Polygonal upper section with signs of finger pressing, narrow rounded lower section. Roughly made. Reddish-brown ware (5YR4/4), medium fired.

683 Stopper

Reg. No. 79/Y/68/307–308; Area Y, Sq. X12, Bucket 107

wide max: 5 length max:6.5

Dome-shaped. Finger made depression on one side. Roughly made, red ware. Weak red ware (2.5YR5/4), minute black grits, medium fired.

9.6. Amphoriskoi

The term is applied to small jars or amphorae that served as containers for transporting oil and unguents. The traditional amphoriskos was unknown in the Western world; the Greeks preferred the Aryballos, Alabastrus and Lekythos. In Mesopotamia and Anatolia the bottle and the jar were most common. However, the Levant was familiar with the amphoriskos already in the Bronze and Iron Age and during the Persian and Hellenistic Periods (Berlin 1997:54, with full references). It was of Phoenician manufacture and served the Phoenician unguent industry, which shipped it in bulk and transferred it at the time of purchase to smaller amphoriskoi. The amphoriskos can be considered the most popular vessel associated with the Phoenician trade.

The question of their capacity is still unsolved. Measurements of the Tel Anafa vessels revealed that even though the amphoriskoi size and shape appear uniform, their capacity was varied. Berlin suggested dividing the bottles according to three standard sizes: small (40–70 ml), medium (130–170 ml), and large (250 ml) containers (Berlin 1997, note 135). However, amphoriskoi from Dor had an average capacity of 103 ml (Guz-Zilberstein 1995:308). Those from Shiqmona were of a very small capacity with very thick walls that leave little room for the content (Elgavish 1974:54, pl. XVI:229–232).

In Jaffa, several fragments of the typical Hellenistic amphoriskos were recovered dated to the 2nd–1st century BCE. They have usually a thick rim, high neck and elongated body terminating in a pointed base. Two loop handles are attached from mid-neck to shoulder. The fabric is coarse and the walls are thick and heavy, fashioned in careless manner that left an asymmetrical vessel with a rough surface.

The amphoriskoi in Jaffa were of several sizes. None of them was of the heavy walled type with a small content capacity. A few were with a large content capacity and pointed base (685–686) and others were with a slim body and a medium content capacity (687). One example has a truncated base (684). According to parallels, the various nuances within the form do not indicate chronological or regional development. The various amphoriskos subtypes appear from the 2nd to the early 1st century BCE. Their Phoenician origin connected them to coastal sites such as Caesarea (Oleson 1994:145, fig. 54:C54), Dor (Guz-Zilberstein 1995:308, fig. 6.29:1–5), Shiqmona (Elgavish 1974:54, pl. XVI:229–232), Apollonia (Fischer and Tal 1999:246, fig.5.14:6) and Ashdod (Dothan 1971:48, figs 10:9, 234:13) as well as northern sites such as Yoqne'am (Avisar 1996:57, fig. X.7:10), 'Ein Gev, and Tell esh-Shusa in the Galilee (Berlin 1997:84, with full references). The 177 amphoriskoi fragments found at Tel Anafa were similar in size and shape and may have come from a single workshop. All those recovered were dated from 125 BCE to the early 1st century BCE (Berlin 1997:56–7, pl. 11:69–75). The appearance of a single amphoriskos in Maresha is reasonable since Phoenician ware was familiar in this site (Levine 2003:100, fig. 6.9:89).

Date range: 2nd – early 1st cent. BCE

684 Amphoriskos

Reg. No. 79/A/70/231; Area A, Sq. K4, Bucket 201

Base diam.: 2.1; Max h.: 19.5

Conical body, narrow flat base, traces of two handles. Thumb indentation on body. Pink ware (7.5YR7/4), many minute black grits, hard fired.

685 Amphoriskos

Reg. No. 79/A/70/230; Area A, Sq. L3, Bucket 261

Max h.: 19

Conical body, traces of handle. Light brown ware (7.5YR6/4), a few small red grits, hard fired.

686 Amphoriskos

Reg. No. 79/Y/64/118; Area Y, Sq. 1, Locus 600, Bucket 2

Max h.: 12.5

Piriform body, two handles attached from neck to shoulder. Light brown ware (7.5YR6/4), many small black grits, hard fired.

687 Amphoriskos

Reg. No. 79/J/70/006; Area J, Bucket 78

Max h.: 13

Conical body, traces of handle. Reddish-yellow ware (5YR6/6) and yellowish-red core (5YR5/6), many small and large white grits, medium fired.

9.7. Fine Wares

9.7.1. Greek Imported Ware

9.7.1.1. East Greek Pottery

The East Greek assemblage includes a variety of ware from eastern Mediterranean centers of manufacture dated from the 7th to the 5th century BCE. Their precise place of origin is still unknown, but several suggestions were the Eastern Greek mainland (southwestern coast of modern Turkey: Ionia, Caria, Lycia and Cilicia), the Greek Islands (Chios, Samos, Cos, Rhodes) and Cyprus (Tal 1999:107). The ware is hard fired to red color and decorated with horizontal painted bands, wavy bands and “drop lines” in red, brown and blackish colors. Some of the vessels underwent petrographic analysis and the results is presented in the following discussion (Nos. 688, 702, 711, 719, 720).⁶⁷

East Greek pottery appeared in Israel in the 7th century BCE and continued into the Persian period. The examples are fragmentary and cannot always be identified with certainty. Usually they include decorated body sherds of large vessels such as kraters, a variety of jugs, amphoras and hydria. The most common type is the banded bowl. The fragmentary nature of the pottery, the broad chronological span and the regional variety of possible places of manufacture as well as the scarcity of publications make it very difficult to determine their exact definition.

The East Greek types were replaced by the Attic ware in Israel during the late 5th century BCE (Marchese 1989:146, Tel Michal).

9.7.1.1.1. Banded Bowls

Shallow bowl with incurved rim, rounded wall and ring base. They sometime have either one or two horizontal loop handles attached below rim. The fabric is hard fired and covered with a thin layer of wash in the clay color. The upper part is decorated with red, brown or black painted bands.

They were found in Attica (Sparkes and Talcott 1970, fig. 8:726–741) as well as at Eastern Greek sites. The earliest types were characterized by a single handle and attributed to Eastern Greek origin based on a potter’s mark on one of the bowls retrieved from Mersin, which also occurred on an Ionian cup (Barnett 1940:120). According to their distribution pattern along the southern coast of Anatolia and the northern coast of the Levant, including Israel, it is also plausible that their origin may have been in another center of production. (Rast 1978; Lehmann 1996). Petrographic analysis suggested their origin in Cilicia or the North Syrian coast.

The one-handled bowl appears in the late 7th century in Sukas (Ploug 1973:38–9, fig. c:133a–137) and Rhodes (Jacopi 1929–1936). In Israel they probably appeared at Tel Keisan, in the 2nd quarter of the 6th century BCE (Nodet 1980:126, pl. 22:6). They were one of the most dominant types among the imported fine ware at Tel Mevorakh (Rosenthal 1978:41, fig. 10:6–9) and at Tel Qiri (Avissar 1987:20, fig. 5:18) and particularly along the Coastal Plain. At Dor, they comprise 37% of the Greek pottery at the site (Mook and Coulson 1995:93). At Apollonia they comprise 70.58% of the East Greek ware at the early Persian level (late

⁶⁷ I wish to thank Yiftah Shalev and David Ben Shlomo for sharing with me the results of their brief section on petrographic analysis. This information was part of a research project funded by the Israel Foundation Grant 570/09 awarded to Ayelet Gilboa and Gunnar Lehmann.

6th to mid-5th cents. BCE) while in the late Persian level (mid-5th to mid-4th century BCE) the banded bowls represent 32.43 % of the imported ware (Tal 1999:107). But at Tel Michal they are rather rare and are represented by only two pieces (Marchese 1989:146, fig. 10.1:6–7).

The Jaffa assemblage can be divided into four subtypes according to rim and body shape development.⁶⁸

A. Handled Bowls (Nos. 688–690)

Steep rim with pointed lip, deep wall and two horizontal handles attached below rim. This first subtype is considered the prototype of the Eastern Greek banded bowls. Its first appearance is dated from the late 7th to the early 6th century BCE in Mersin, southern Anatolia (Barnett 1940:120–21) and Cypriot sites (Gjerstad 1948:31). In the Persian period the type was introduced into many eastern Mediterranean sites such as Sukas, Ras Shamra, and al-Mina.⁶⁹

At Dor, Type A was dated from the mid-6th to the 2nd half of the 5th century BCE (Mook and Coulson 1995:94, figs. 3.1–3.2). At Apollonia, its first appearance was in the Early Persian 1 level dated from the late 6th to the mid-5th century BCE (Tal 1999:107–8, fig.4.15:1–4). Other sites along the Coastal Plain are Tel Mevorakh (Stern 1978:41, fig.10:6–9) and Tel Michal (Marchese 1989:146, fig. 10.1:7). Type A is the most common Eastern Greek shape at Tell el-Hesi and appeared in the mid-5th to the early 4th century levels (Bennett and Blakely 1989, figs. 66:3–4, 5; 67:7; 74:11; 75:13, 15). Petrographic analysis did not provide the origin of bowl no. 688.⁷⁰

Date range: mid-6th – 5th cents. BCE

688 Bowl

Reg. No. 79/Y/68/280; Area Y, Sq. X12, Locus L–3, Bucket 147

Rim diam.: 17.5; Max h.: 4.5

Incurved rim with pointed lip. Rounded wall, two horizontal loop handles attached below the rim. Wide black panel on upper inner face and rim and narrow black band on outer face rim. Reddish-yellow ware (7.5YR6/6) and red core (2.5YR6/8), hard fired.

689 Bowl

Reg. No. 79/A/71/214; Area A, Sq. J2, Bucket 585

Rim diam.: 16.5; Max h.: 7

Incurved rim with pointed lip. Rounded wall, two horizontal loop handles attached below the rim. Dusky red bands (2.5YR4/4) on external and internal upper face. Reddish-yellow ware (5YR6/6), hard fired.

690 Bowl

Reg. No. A/72/B172.2; Area A, Sqs. J2–J3, Bucket 172

Rim diam.: 11; Max h.: 5.5

Incurved rim with pointed lip. Rounded wall, two horizontal loop handles attached below the rim. Black bands (5YR2.5/1) on inner and outer upper face. Reddish-yellow ware (5YR6/6), a few minute white grits, hard fired.

B. Pointed Lip (Nos. 691–693)

Triangular rim, rounded wall slightly flared creating shallower bowl, no handles. Their appearance began slightly later than Type A, probably during the 2nd quarter of the 6th century, as is evident from the Sukas and Tarsus examples (Ploug 1973:40, nos. 133a, 134). At Dor, it was classified as Type C dated to the 5th century (Mook and Coulson 1995:94, fig. 3.3). The type was common at Tel Michal as well (Marchese 1989:146, fig. 10.1:6).

Date range: 6th–5th cents. BCE

⁶⁸ Mook and Coulson 1995:93–4. The banded bowls were divided into five subtypes according to rim development in the assemblage at Dor.

⁶⁹ Lehmann 1996:23–4, fig. 9:2–5. They are attributed to Assemblage 6–7 and dated to 540–360 BCE.

⁷⁰ See n. 27.

691 Bowl

Reg. No. 79/A/55/112; Area A, Sq. H8, Locus 4B

Rim diam.: 22; Max h.: 3.5

Pointed steep rim, shallow wall. Dark red/brown bands on inner upper face. Dark red slip on the rim and wide black band on the inner face. Reddish-yellow ware (5YR6/8), a few large red grits, hard fired.

692 Bowl

Reg. No. 79/Y/64/080; Area Y, Sq. 3, Locus 604, Bucket 34

Rim diam.: 22; Max h.: 5

Pointed steep rim, shallow wall. Dark red slip on the rim and wide black band on the inner face. Reddish-yellow ware (5YR6/8), a few large red grits, hard fired.

693 Bowl

Reg. No. 79/H/64/012; Area H, Sq. 1, Locus 401, Bucket 16

Rim diam.: 20.5; Max h.: 4.5

Pointed steep rim, shallow wall. Brown colored band on both upper sides. Pink ware (7.5YR7/4) and light brown core (7.5YR6/4), many small white grits, hard fired.

C. Triangular Rim (Nos. 694–696)

Triangular rim contracted inward and creating external carination at junction with sloping wall. They can be considered a local imitation of the previous Type B, since they were found in small quantities in Dor. Type C was classified in Dor as Type D dated to the late 6th/early 5th century BCE (Mook and Coulson 1995:94, fig. 3.4). Only a few bowl rims were found at Tel Michal and Apollonia dated from the late 6th to the 4th century BCE (Fischer 1989:146, fig. 10. 1:6; Tal 1999:107–8, fig. 4.15:7). Another example that was found at Tell el-Hesi was dated to the mid-5th century BCE (Bennett and Blakely 1989:93, fig. 68:9).

Date range: late 6th–5th cents. BCE

694 Bowl

Reg. No. 79/A/70/160; Area A, Sq. J3, Bucket 185

Rim diam.: 18; Base diam.: 6; Max h.: 8

Everted rim folded slightly inward, sloping wall, low ring base. Wide red band (2.5YR4/6) on upper inner face and rim. Red ware (2.5YR6/6) and a few small white grits, hard fired.

695 Bowl

Reg. No. A/70/B152.2; Area A, Sq. J4, Bucket 152

Rim diam.: 8; Max h.: 3.5

Everted rim folded slightly inward, sloping wall, low ring base. Wide red and brown bands (2.5YR5/4–4/2) on upper inner face and rim. Very pale brown ware (10YR8/3), many minute black grits, hard fired.

696 Bowl

Reg. No. A/70/B313; Area A, Sq. K3, Locus 505, Bucket 313

Rim diam.: 16.5; Max h.: 2.5

Everted rim folded slightly inward. Black band on inner face and rim. Light reddish-brown ware (5YR6/4), hard fired.

D. Shallow Wall (Nos. 697–701)

Plain rim, shallow wall with narrow ring base.

One bowl rim was found at Tel Michal dated from the late 6th to the 4th century BCE (Fischer 1989:146, fig. 10.1:5). At Tell el-Hesi, Type 4 was dated from the mid-5th to the early 4th century BCE (Bennett and Blakely 1989, figs. 67:8; 74:12; 75:14).

Date range: late 6th–early 4th cents. BCE

697 Bowl

Reg. No. 79/Y/68/313; Area Y, Sq. X12, Locus L–3, Bucket 145

Rim diam.: 15.8; Base diam.: 5.5; Max h.: 5.5

Plain rim, rounded wall, ring base. Reddish-black bands (5YR4/2) on internal face and rim. Reddish-yellow ware (5YR7/6), hard fired.

698 Bowl

Reg. No. A/71/B150; Area A, Sq. I3, Bucket 150

Rim diam.: 13.5; Max h.: 3.5

Plain rim, rounded wall, ring base. Brownish bands (5YYR6/6) on upper face. Reddish-yellow ware (5YR7/6), hard fired.

699 Bowl

Reg. No. 79/A/56/201; Area A, Sq. H9

Rim diam.: 12.5; Base diam.: 4.5; Max h.: 4.3

Plain rim, rounded wall, ring base. Black band (5YR2.5/1) on rim and upper part of wall. Reddish-yellow ware (5YR6/6), hard fired.

700 Bowl

Reg. No. A/71/B197; Area A, Sq. I3, Bucket 197

Base diam.: 9.5; Max h.: 2.5

Rounded floor, ring base, concentric brown bands on floor. Reddish-yellow ware (5YR6/6) and gray core (5YR5/1), many minute black grits, hard fired.

701 Bowl

Reg. No. 79/A/56/202; Area A, Sq. H7

Ring base. Three red concentric circles on floor (2.5YR5/6). Reddish-yellow ware (5YR6/6), many small white grits, hard fired.

9.7.1.1.2. Flared Rim Plates (Nos. 702–703)

Flared rim with infolded lip creating internal groove. In Jaffa, one decorated plate was found with red slip on the rim and wide black band on the internal wall. A similar plate was recorded in al-Mina, classified as belonging to the Persian assemblage (Lehmann 1998:23, fig. 9:4; Lehmann 1996, 1996, pl. 25:157/2). Petrographic analysis confirmed the Cilician origin of plate no. 702.⁷¹

Date range: Persian

702 Plate

Reg. No. 79/Y/68/292; Area Y, Sq. Y13, Locus L–21, Bucket 47

Rim diam.: 25; Base diam.: 12; Max h.: 3

Flared out-turned and grooved rim, shallow and sloping wall, ring base, burnished on outer face. Wide red bands (2.5YR5/6) with narrow brownish band (2.5YR3/4) on the inner face. Reddish-yellow ware (5YR7/6), hard fired.

703 Bowl

Reg. No. A/71/B173; Area A, Sq. I3, Bucket 173

Rim diam.: 23; Max h.: 3.3

Flared grooved inside rim and wall. Red ware (2.5YR6/6) and dark red core (2.5YR4/8), many minute white grits, hard fired.

9.7.1.1.3. Kraters (No. 704–706)

One example of a decorated krater was found in Jaffa as well as two body sherds. The body was decorated with wavy and straight lines on the neck and shoulders (704). Two fragments with the same decoration probably belong to a krater shoulder (705–706). The shape resembled the traditional Corinthian column krater. A similar East Greek krater from al-Mina was attributed to assemblages 6–7, dated to the Persian period (Lehmann 1996, pl. 36, Form 205/1, 207/1; 1998:23, fig. 9:8). A single fragment was found at Tell el-Hesi, dated to the mid-5th century BCE (Bennett and Blakely 1989:95, fig. 68:21). The wavy and straight line decoration

⁷¹ See n. 27.

appeared at the Athenian Agora painted upon the standard krater dated to 260–86 BCE (Rotroff 2006:105–108, fig. 37:221).

Date range: Persian–Hellenistic

704 Krater

Reg. No. 79/A/56/172; Area A, Sq. I9

Rim diam.: 35; Max h.: 12

Vertical thickened rim, wide low neck, rounded shoulder. Dark brown wavy and horizontal bands on external face. Light brown ware (7.5YR6/3), a few minute black grits, hard fired.

705 Krater

Reg. No. 79/Y/68/291; Area Y, Sq. Y13, Locus L–15, Bucket 85

Shoulder fragment. Red wavy line between red wide bands on external face. Yellowish-red ware (5YR5/6), a few large white and black grits, hard fired.

706 Krater

Reg. No. A/71/B144.2; Area A, Sq. I3, Bucket 144

Shoulder fragment. Black wavy line between wide bands on external face. Light reddish-brown ware (5YR6/3), hard fired.

9.7.1.1.4. Lekane (Nos. 707–708)

The lekane is an open basin made of household ware that was in common use as domestic equipment. Its great popularity in Athens was emphasized by the fact that more than 23% of the ostraka of 490–480 BCE found in the Agora were described as lekane fragments (Sparkes and Talcott 1970:211).

In Jaffa, a rim fragment was found with a painted band decoration and a heartshaped pattern below it (707). Parallel ostraka of Attic origin with the same bold curved rim was dated in the Athenian Agora before 480 BCE (Sparkes and Talcott 1970:213, pl. 84:1792, 1798).

Date range: Persian

707 Krater

Reg. No. 79/G/64/021; Area G, Sq. 23, Bucket 10

Rim diam.: 30; Max h.: 7

Knobed rim hanging out and downward, thick vertical wall. Red slip (2.5YR4/6) on upper part and rim, red painted heart pattern on upper part of wall. Light reddish-brown ware (5YR6/4), hard fired.

708 Krater

Reg. No. 79/A/56/174; Area A, Sq. D.7

Rim diam.: 24; Max h.: 6.4

Horizontal rim, rounded wall widening downward. Traces of white wash lines on external face. Dark red ware (2.5YR4/6), a few small white grits.

9.7.1.1.5. Kantharoi (No. 709)

Flared rim, wide neck, carinated shoulder and flat base.

709 Kantharos

Reg. No. 79/Y/64/124; Area Y, Sq. 4, Locus 606, Bucket 48

Rim diam.: 9.5; Base diam.: 3; Max h.: 8

Flared rim, wide neck, rounded shoulder, concave base. Black slip on inner and upper internal face. Pink ware (5YR7/4), hard fired.

9.7.1.1.6. Amphoriskoi (Nos. 710–711)

Two examples of amphoriskoi were found in Jaffa. One of them is almost complete (710). The second probably displays a shoulder fragment with the typical concentric bands around the shoulder and belly in red color (711). Petrographic analysis suggested a North Phoenician origin. In Israel, the Eastern Greek amphoriskos is rather rare. The type was found in small quantities in Dor dated to 200–125 BCE (Mook and Coulson 1995:96, fig. 3.9:4–5) and in Shiqmona dated to the late 4th century BCE (Elgavish 1968:55, pl. LXVI:185).

Date range: late 4th – early 2nd cent. BCE

710 Amphoriskos

Reg. No. 79/A/73/109; Area A, Bucket 531

Base diam.: 3.7; Max h.: 8

Piriform body, ring base, two small horizontal handles on shoulder. Dark red bands on shoulder, body and handles (2.5YR4/6). Pink ware (7.5YR7/3), a few minute black grits, hard fired.

711 Amphoriskos

Reg. No. 79/A/56/200; Area A, Sq. I8

Thick wall. Three red parallel bands (2.5YR5/8). Pink ware (7.5YR7/3), many small black and few small red grits, hard fired.

9.7.1.1.7. Lekythoi (Nos. 712–713)

The lekythos is very fine and displays the shape and decoration style known to us from the Classical Attic tradition. The body is elongated like the traditional “Black Body” lekythos and the decoration pattern characterizes the “White Ground” lekythos.

In Jaffa, a shoulder fragment was found decorated on a clay color background with the traditional meander pattern in red paint. At Dor, the same style and pattern of decoration on similar shoulder fragments were identified as the work of the Beldan workshop and dated to 470–460 BCE (Mook and Coulson 1995:96, fig. 3.9:1–2). At Ashdod, a similar shoulder fragment, with a row of rays and meander below, was identified as “White Ground” lekythos dated to the 5th–4th centuries BCE (Dothan 1971:51, fig. 14:4). At Shiqmona the type was dated to the late 4th century BCE (Elgavish 1968: 46, pl. LII:113).

Date range: 5th – late 4th cent. BCE

712 Lekythos

Reg. No. 79/Y/68/282; Area Y, Sq. X12, Locus L–1, Bucket 124

Max h.: 3

Carinated shoulder. Vertical brown line on shoulder. Reddish-yellow ware (5YR7/6), hard fired.

713 Lekythos

Reg. No. 79/Y/68/285; Area Y, Sq. X12, Locus L–1, Bucket 133

Max h.: 5.6

Carinated shoulder. Red vertical lines on clay color background round the neck, red meander pattern between two parallel lines on clay color background beneath the shoulder. Light reddish-brown ware (5YR6/4) and yellowish-red core (5YR5/6), hard fired.

9.7.1.1.8. Jugs (Nos. 714)

One jug rim was found in Jaffa. A similar jug was dated to the Persian period (Lehmann 1996, pl. 44, Form 267–269). At Ramat Hanadiv, the type was identified as a locally manufactured jug dated from the 2nd to the 1st century BCE throughout Israel (Silberstein 2000:429, pl. IV:16).

Date range: Persian–Late Hellenistic

714 Jug

Reg. No. A/70/B97; Area A, Sq. J3, Bucket 97

Rim diam.: 4; Max h.: 4.5

Thick overhanging rim, narrow cylindrical neck. Red painted bands (2.5YR4/6) on outer face and rim. Reddish-yellow ware (5YR6/6), many minute black grits, hard fired.

9.7.1.1.9. Bottles (Nos. 715–716)

A semi-complete bottle with missing base and rim and decorated with painted bands on shoulder was found in Jaffa (715). No clear traces of handles could be identified. However, a similar body fragment of an amphoriskos was recovered from Tell el-Hesi dated to the mid-5th century BCE (Bennett and Blakely 1989:93, fig. 68:2). At Sukas, a base fragment was attributed to the Chain White Slip Amphora from Cyprus dated to the 6th century BCE (Ploug 1973:84, 86, fig. f:395). At Gil'am the type was defined as the East Greek fusiform bottle, common at Cypriot tombs during the late 5th–4th centuries BCE (Stern 1970:41, 52, fig 10:1, pl. xvi:4).

The Jaffa example (715) is most similar to the banded bottles at Tel Anafa dated to the late 2nd century (125 BCE). The appearance of large quantities of banded fusiform unguentaria at Tel Anafa was explained as local imitations influenced by the Greek or Graeco-Phoenician population at the site (Berlin 1997:59, 64, pl. 13:PW85–93).

Date range: 6th – late 2nd cents. BCE

715 Bottle

Reg. No. 79/A/56/149; Area A, Sq. I9

Max h.: 19.5

Narrow neck, fusiform body. Light brown bands (5YR6/8) on shoulder. Pink ware (5YR7/4), hard fired

716 Bottle

Reg. No. C/61/616; Area C, Sq. CC101, Bucket 646

Max h.: 7.5

Bag shaped low part of body with pointed base. Two red bands (2.5YR5/8) on lower body. Pink core (7.5YR7/3), many small white and black grits, soft fired.

9.7.1.1.10. Hydria (Nos. 717–718)

In Jaffa, two fragments were recovered of a neck and rim with the typical Greek Islands banded decoration. The same example from the Athenian Agora was defined as hydria and dated from the late 6th to the early 5th century BCE (Sparkes and Talcott 1970:200, fig. 13:1583). Their existence in the Athenian Agora was explained as important not for their own sake but as wine containers (Sparkes and Talcott 1970:200, Fig. 13:1579–85). In light of the great popularity of the banded bowl one may connect them together as part of an organized trading system, but at the same time they could be traveler strays. At Dor, the same decorated necks with various thickened rims were classified as jugs or table amphoras. The most similar to Jaffa's examples is Type I, which had no parallels and was dated to 400–350 BCE (Mook and Coulson 1995:96, fig. 3.10:5). At Shiqmona, on the Persian floor dated from the late 6th to the early 5th century BCE, fragments were recovered with the same geometric pattern. They were defined as late 7th century amphorae (Elgavish 1968: 42, pl. L:112). At Gil'am, two fragments were found decorated with the wavy red band (Stern 1970:41, 52, fig. 10:2, pl.XVI:4).

Date range: late 6th early 4th cents. BCE

717 Hydria

Reg. No. 79/A/56/199; Area A, Sq. H.5

Rim diam.: 13; Max h.: 4.5

Thickened rim, wide neck. Brown band on rim, wavy line on wall. Pink ware (5YR7/4), a few small white grits, hard fired.

718 Hydria

Reg. No. 79/A/56/186; Area A, Sq. H7

Max h.: 6.5

Cylindrical neck. Dark brown and gray bands on outer neck. Pink ware and core (5YR7/4), very pale brown slip (10YR8/3), medium and large white and black grits, hard fired.

9.7.1.1.11. Storage Bins and Amphoras (Nos. 719–723)

The term applies to the wide mouthed jar. It is usually provided with a lid and two horizontal handles and used as a container for foodstuffs.

In Jaffa, two body fragments were found decorated with painted bands (719–720). One of them had a palm tree pattern (719). In the Kerameikos in Athens the same large containers were used as ash urns dated to the late 5th–4th centuries BCE (Robinson 1959:195). The Athenian Agora large jar was identified as non-Attic, perhaps of Corinthian origin (Sparkes and Talcott 1970:196, pl. 68:1538–41). Some of them are decorated but without the Jaffa palm tree pattern. All were dated to the 2nd half of the 5th century BCE.

A similar palm tree decoration was found on a large complete jar from al-Mina and was dated to 540–360 BCE (Lehmann 1998:23, fig.10:6). More examples come from Akko and Cyprus (Lehmann 1996:481, Ty. G26b) and appeared on a pseudo Cypriot amphora from the Athenian Agora dated to 375–300 BCE (Rotroff 2006:142, fig. 60:396, 398). The palm tree pattern appeared on two of the amphorae in the Ma'agan Mikha'el shipwreck. The design was considered a traditional Cypriot pattern with good parallels in Cyprus and less common ones on the Levant coast. The Ma'agan Mikha'el assemblage was dated from the late 5th to the early 4th century BCE (Artzi and Lyon 2003:192, fig. 7:1–2). Recent NAA Analysis confirmed a Cypriot origin of the Jaffa example (No. 719).⁷²

The second Jaffa body fragment is of medium size with painted bands (720). The missing upper part makes it difficult to determine its origin. A similar form with the typical Corinthian garland decoration on the shoulder from the Athenian Agora was dated to late 4th century BCE (Sparkes and Talcott 1970:196, pl. 68:1538, fig. 13:1537). Recent NAA analysis suggested a Samian origin.⁷³

The third example from Jaffa belongs to a large open vessel with a wide open mouth, low neck and scalloped pattern on the shoulder between painted bands (722). The heavy coarse fabric is suitable for a large krater or storage jar even though similar shoulder fragments with scallop decoration from the Athenian Agora were defined as large pots of a northeastern Aegean origin (Chios) dated to 520–480 BCE (Sparkes and Talcott 1970:209, 357, fig. 79:1723). The form and decoration seem more comparable to the small storage bin with deep ovoid body that was identified as of Euboean origin⁷⁴ (Sparkes and Talcott 1970:195–6, fig. 67:1528–9). At Apollonia, the same shoulder fragment with a scalloped band decoration displays a closer shape, which can easily be defined as a jug. It was recovered in the early Persian stratum dated from the late 6th to the mid-5th century BCE (Tal 1999:109, fig. 4.16:4). The scalloped band decoration on shoulder fragments from Tel Mevorakh and Dor are similar in style to the example from Jaffa and probably come from the same vessel shape dated from the early 5th to the mid-4th century BCE (Stern 1978:41, fig. 10:13–15, pl. 30:7–8; Mook and Coulson 1995:97, 107–8, fig. 3.11:14–15). In the Athenian Agora evidence were found for the flourishing of the form with incised decorations on the shoulder until the Early Roman period (Rotroff 2006:95, fig. 27:164–166).

Date range: late 6th to mid-4th cents. BCE

719 Storage bin

Reg. No. 79/A/70/115; Area A, Sq. J4, Bucket 186

Max h.: 36

Elliptical body, small horizontal loop handle on shoulder. Red palm tree pattern between to bands (2.5YR5/6) on shoulder. Pink ware (5YR7/3), hard fired.

⁷² See n. 27.

⁷³ See n. 27.

⁷⁴ Unpublished studies made by Miss Farnsworth based on stylistic background but with no petrographic evidence.

720 Storage bin

Reg. No. 79/Y/68/309; Area Y, Sq. X12, Locus L-3, Bucket 149

Max h.: 29

Rounded shoulder, body gradually narrowing downward, horizontal loop handle attached on shoulder. Red band on the shoulder and two red bands (2.5YR5/6) on body. Pink ware (5YR7/4), many minute black grits, hard fired.

721 Storage bin

Reg. No. 79/G/64/068; Area G, Sq. 29, Bucket 83

Rim diam.: 19; Max h.: 4

Thick outcurved rim, low neck ridged at junction with shoulders. Very pale brown ware (10YR7/3;7/4), many small white grits, hard fired.

722 Storage bin

Reg. No. 79/A/71/188; Area A, Sq. J2, Bucket 339, 340

Rim diam.: 29

Thickened rim, neckless, rounded shoulder, small loop handles on shoulder. Brown wide and narrow bands on both sides of a scalloped band, on neck and shoulder. Very pale brown ware (10YR7/3), many small black grits, hard fired.

723 Storage bin

Reg. No. 79/Y/68/297; Area Y, Sq. X12, Locus L-1, Bucket 132

Rim diam.: 11.5; Max h.: 4.5

Thickened rounded rim, sloping wall. Black slip on rim and black wavy band on body. pink ware (7.5YR7/4) and red core (2.5YR6/6), hard fired.

9.7.1.2. Greek Black Figured Ware (Nos. 724–739)

9.7.1.2.1. Boeotia Cups/Skyphoi (Nos. 724–728)

Small cups or skyphoi with flared plain rim, two horizontal handles, and turus foot. The external rim is covered with a black or red band. A black figured decoration appears below the rim. The type was adapted from the Corinthian style to the Attic tradition in the mid-6th century BCE. During the early 5th century the cup attained its conical shape. The decoration and shape vary considerably from workshop to workshop or from potter to potter (Moore and Philippides 1986:59).

In Jaffa, a few rim fragments were recovered. Most of them bear a Palmette pattern (726–728). Similar cups were found in Dor (Marchese 1995:163, fig. 4.8:4, photo 4.14, no. 11) and at Tel Mevorakh dated to the 4th century BCE (Johnson 1978:41, pl. 29:24). At Tell el-Hesi the same decorated cup was identified as a Haemon painter piece dated to 400–350 BCE (Bennett and Blakely 1989:97, fig. 83:33). Skyphos no. 724 is decorated with unidentifiable scenes, which seem similar to the Athenian Agora cup of the typical Haemonian style (Moore and Philippides 1986:61, pl. 102:1504–5). A silhouette style was a very common technique. A skyphos with two human heads in profile (725) was found in Jaffa. A similar decoration was recovered in Apollonia (Tal 1999:164–5, fig. 4.45:11–13) and at the Athenian Agora dated from the mid-5th to the mid-4th century BCE (Moore and Philippides 1986:66, pl.125:1340–1).

Date range: mid-5th–4th cents. BCE

724 Cup

Reg. No. 79/Y/62/022; Area Y, Bucket 27

Rim diam.: 19; Max h.: 4.5

Outcurved rim ridged at junction with rounded wall. boat(?) and rowers decoration on outer face. Red ware (2.5YR6/8) and reddish-yellow core (5YR6/6), hard fired.

725 Cup

Reg. No. A/71/B86; Area A, Sq. I4, Locus 604, Bucket 86

Rim diam.: 18.5; Max h.: 4

Flared rim, concaved at outer face and ridged at junction with rounded wall. Heads of two human figures in profile displayed on outer face. Reddish-yellow ware (5YR6/6), hard fired.

726 Cup

Reg. No. 79/A/56/204; Area A, Sq. I8

Rim diam.: 18; Max h.: 3.4

Sharp rim, slightly rounded wall. Black band on outer rim and traces of Palmette pattern(?) below it. Light reddish-brown ware (5YR6/4), many minute black grits, hard fired.

727 Cup

Reg. No. 79/A/74/077; Area A, Bucket 185

Rim diam.: 18.5; Max h.: 4.5

Flared plain rim. Red band (2.5YR4/6) on outer face of rim and vegetation pattern below rim. Light reddish-brown ware (5YR6/4), hard fired.

728 Cup

Reg. No. 79/Y/68/295; Area Y, Sq. X12, Locus L-1, Bucket 18

Rim diam.: 18; Max h.: 3.6

Vertical plain rim, angular body profile. Wide brown-red band on rim and palmette pattern with three leaves below it. Reddish-yellow ware (5YR6/4), hard fired.

9.7.1.2.2. Pattern Lekythoi (Nos. 729–730)

In Jaffa, fragments of a Pattern Lekythoi was found decorated with the most common motives typical of the Beldan workshop, the chequer square bands (729) and ivy berry tendril (730). That type of lekythos was manufactured at the Beldan workshop, which was active in Athens not before the 2nd quarter of the 5th century. The ivy tendril lekythos belongs to the White Ground type that was buried with the dead. similar example were found in the Athenian Kerameikos (Kurtz 1975:154, pl. 70:5) or at burial graves in Corinth dated to the last quarter of the 5th century BCE (Kurtz 1975:154, pl. 70:6–8). The type was pretty common in Israel from the mid-5th until the mid-4th century BCE and were found in Apollonia (Tal 1999:163, fig. 4.44:4), 'Atlit (Johns 1933, pl. XX:L 23), Tell el-Hesi (Bennett and Blakely 1989:108, fig. 70:78) and in Egypt (Clairmont 1955:116, pl. XXV:153, 148).

Date range: mid-5th – mid-4th cents. BCE

729 Lekythos

Reg. No. A/71/B155; Area A, Sq. I3, Bucket 155

Wall fragment. Crosses vertical and horizontal lines above horizontal black bands on outer face.

730 Lekythos

Reg. No. 79/Y/64/085; Area Y, Sq. 4, Locus 606, Bucket 59

Wall fragment. Black ivy tendril and flower on white background on outer face. Light reddish-brown ware (5YR6/4), hard fired.

9.7.1.2.3. Panathenaic Amphoras (Nos. 731–733)

A few fragments probably belong to Panathenaic amphora judging from the decorations. The first example (731) displays a chariot wheel, probably of a riding goddess. A similar decoration appeared in the Athenian Agora dated from the late 6th century to 490 BCE (Moore and Philippides 1986:130, pl. 26:223; 174–5 pl. 55:575). Two other examples decorated with parts of athlete legs (732–733) were dated in the Athenian Agora to 560–550 BCE (Moore and Philippides 1986:131–2, pl. 27:228).

Date range: 6th – early 5th cents. BCE

731 Amphora

Reg. No. 79/A/56/273; Area A, Sq. H.10

Wall fragment. Chariot wheel with four spokes and central axle, right arm holding reins above, and horse's tail on right, on external wall. Reddish-yellow ware (5YR6/6), hard fired.

732 Amphora

Reg. No. 79/X/60/005; Sounding X, Bucket 44

Wall fragment. Pair of black male legs, probably of a wrestler, on red background, and incisions, on external wall. Reddish-yellow ware (5YR6/6), hard fired.

733 Amphora

Reg. No. 79/A/55/119; Area A

Wall fragments. Lower part of male figure on one sherd. Buttocks of horse(?) on another sherd. Light reddish-brown ware (5YR6/4), hard fired.

9.7.1.2.4. Miscellaneous (Nos. 734–739)

734 Vessel

Reg. No. 79/A/56/276; Area A, Sq. H6

Wall fragment. Palmette pattern in black on clay color background on outer face. Light reddish-brown ware (5YR6/4), hard fired.

735 Vessel

Reg. No. 79/Y/68/278; Area Y, Sq. X12, Locus L–1, Bucket 17

Wall fragment. Black rolled lines, branches of plant(?) on outer face. Light reddish-brown ware (5YR6/4), hard fired.

736 Vessel

Reg. No. 79/Y/68/287; Area Y, Sq. Z14, Locus L–12, Bucket 58

Wall fragment. Two rows of black ivy leaves on clay color background on outer face. Light reddish-brown ware (5YR6/4), hard fired.

737 Vessel

Reg. No. 79/J/70/065; Area J, Bucket 51

Wall fragment. Unidentified decoration on outer face. Light reddish-brown ware (5YR6/4), hard fired.

738 Vessel

Reg. No. 79/Y/68/261; Area Y, Sq. X12, Locus L–1, Bucket 120

Wall fragment. Ivy pattern (related to Dionysus) in black on clay color background on outer face. Light reddish-brown ware (5YR6/4), hard fired.

739 Vessel

Reg. No. 79/Y/68/272; Area Y

Wall fragment. Unidentified decoration on outer face. Light reddish-brown ware (5YR6/4), hard fired.

9.7.1.3. Greek Red Figured Ware (Nos. 740–758)

9.7.1.3.1. Owl Skyphoi (No. 740)

Plain incurved rim, slightly rounded wall, ring base. Two different handles, one horizontal and the second vertical strap handle, below rim. The type is characterized by the owl decoration between olive sprigs on both sides, on center of wall. The owl skyphoi was most common throughout the Western Mediterranean during the Classical period. A few examples were collected and classified by Johnson (Johnson 1955:119–124, pl. 35–38). In the Athenian Agora, a few examples were found that could be attributed to a particular painter. They were dated to the late 6th century and mainly mid-5th century BCE (Moore 1997:63–64, 306–307, pl. 122:1313–1322).

In Jaffa, a single rim fragment was found decorated with an olive sprig that probably belongs to the owl skyphos type. Similar decorated fragments were found at Tell el-Hesi, dated to 400–350 BCE (Bennett and Blakely 1989:100, fig. 83:51, 97) and in a late 5th century BCE context in Antioch (Clairmont 1955:130, pl. XXX:308).

Date range: mid-5th – mid-4th cent. BCE

740 Skyphos

Reg. No. 79/A/71/226; Area A, Sq. I2, Bucket 379

Rim diam.: 9.3; Max h.: 2.6

Pointed rim, steep wall. Olive sprig pattern on outer face. Light reddish-brown ware (5YR6/4), hard fired.

9.7.1.3.2. Askos (No. 741)

The askos is a small round jug with an oblique spout that was used for pouring liquids such as oil, wine or honey. The Jaffa example seems to be a rim fragment of an askos. No parallels were found.

741 Askos

Reg. No. 79/A/71/227; Area A, Sqs. I2–I3, Bucket 535

Rim diam.: 5; Max h.: 1

Wall fragment. Olive sprig pattern, on outer face. Light reddish-brown ware (5YR6/4), hard fired.

9.7.1.3.3. Attic Saint Valentine Ware Cups (Nos. 742–743)

Kantharoi and Type A skyphoi of a single workshop made of fine fabric with various colorful decorations applied either in black glaze on reserved background or in white on black glaze. The group got its name from the well-preserved kantharos found in La Motte Saint Valentin in France (Moore 1997:61). Howard and Johnson classified nine subtypes according to various decoration combinations (Howard and Johnson 1954:191–207, pls. 32–34).

In Jaffa, skyphoi fragments were found. A plain rim fragment with rounded wall (742) and a body sherd (743) of a delicate cup that was probably a skyphos. The first fragment, was decorated with the typical tongue pattern on rim and diamond pattern below it was difficult to classify as one of Johnson subtypes, even though it most resembles Group IV (Johnson 1954, pl. 34:19). In the Athenian Agora, fragments of various skyphoi and kantharoi were recovered (Moore 1997:297, pl. 117:1230–1236). They were identical to the Jaffa fragments attributed to the Johnson Group I and display the decorated lower wall with ivy pattern, dated to the 3rd quarter of the 5th century BCE. In Tel Michal, a single fragment was found at the 490–450 BCE level (Marchese 1989:147,150, fig.10.2:25). At Tell el-Hesi several skyphoi fragments appeared from the 5th to the mid-4th century BCE, despite their attribution according to parallels from the British Museum to the 3rd quarter of 5th century BCE (Bennett and Blakely 1989:106, nos. 68–71). In Jerusalem, a similar vessel was identified as a red figured kantharos (Clairmont 1955:132, pl. XXX:335).

Date range: 5th – mid-4th cents. BCE

742 Skyphos

Reg. No. 79/Y/68/289; Area Y, Sq. X12, Locus L–3, Bucket 144

Rim diam.: 10; Max h.: 3

Vertical plain rim, rounded wall. Tongue pattern below rim, lozenge pattern with dot in each unit, on outer face. Reddish-yellow ware (5YR6/6), hard fired.

743 Skyphos

Reg. No. 79/Y/68/271; Area Y, Sq. Y14, Locus L–31, Bucket 182

Wall fragment. Lozenge pattern with dot in each unit on outer face. Light reddish-brown ware (5YR6/4), hard fired.

9.7.1.3.4. Bell Kraters (Nos. 744–750)

Flaring and slightly over-hanging rim, concaved body, tapering toward ring base. Two horizontal upturned handles attached to the body.

In Jaffa, fragments were found of the bell krater typical of the Athenian Agora repertoire dated to the mid-5th and the 4th centuries: a handle with egg pattern around the root of the handle (748) (Moore 1997:190, no. 323), and rim fragments decorated with the most common laurel wreath pattern (744–746) (Moore 1997:186, nos. 303, 318, 319, 322, 328). A similar krater was found at Tell el-Hesi dated to the 5th century BCE (Bennett and Blakely 1989:99, fig. 69:48). A single example with male and female wreathed heads (745)

could belong to the Altamura Painter and the Niobid Painter workshop dated to the 2nd quarter of the 5th century BCE according to parallels from the Athenian Agora (Moore 1997:186, no. 303). A similar human bearded head appeared on a bell krater fragment from a mixed material pit in Ashdod (Ben Shlomo 2005:237, fig. 3.112:1; Dothan 1971:51, fig. 14:5–6). Another fragment with the lower part of a human body (749) is part of a figural scene dated in the Athenian Agora to 470 BCE (Moore 1997:185, pl. 40:293). Similar fragments were found in Dor and dated to 400–350 BCE (Marchese 1995:169, fig. 4.8:19). In Alexandria, a complete bell krater was found with an entire figural scene, dated to the 1st half of the 4th century BCE (Clairmont 1955:122, pl. XXVII:213).

In Israel, the bell krater with a laurel wreath pattern below the rim is quite commonly found at coastal sites such as Dor where the fragments were dated to the late Persian and Early Hellenistic periods (Marchese 1995:168, fig. 4.8:17–18, 21–22). At Apollonia, the type was found in a refuse pit of the Hellenistic period (Tal 1999:237, fig. 5.11:13).

Date range: mid-5th – 4th cents. BCE

744 Krater

Reg. No. 79/A/70/167; Area A, Sq. K3, Bucket 286

Rim diam.: 38.5; Max h.: 3.5

Flared rim, sloping wall. Laurel wreath pattern decoration below rim on outer face. Light reddish-brown ware (5YR6/4), hard fired.

745 Krater

Reg. No. 79/Y/62/011; Area Y, Bucket 4

Flared rim. Laurel wreath pattern below rim. Bearded male with wreathed head facing left next to a female wreathed head facing right. Light reddish-brown ware (5YR6/4), hard fired.

746 Krater

Reg. No. 79/A/72/134; Area A, Bucket 422

Flaring thickened rim. Laurel wreath pattern on outer face. Reddish-yellow ware (2.5YR6/6), hard fired.

747 Krater

Reg. No. 79/A/56/274; Area A, Sq. I8

Wall fragment. Unidentifiable decoration. Light reddish-brown ware (5YR6/4), hard fired.

748 Krater

Reg. No. 79/Y/62/388; Area Y

Horizontal loop handle decorated with black pattern of “ovolo and darts” on red background. Reddish-yellow ware (2.5YR6/6), hard fired.

749 Krater

Reg. No. 79/Y/68/288; Area Y, Sq. X12, Locus L–1, Bucket 134

Wall fragment. Key meander and chess pattern below two figures showing only the legs and lower part of the body (male and female) on outer face. Light reddish-brown ware (5YR6/4), hard fired.

750 Krater

Reg. No. 79/A/56/271; Area A, Sq. H.5

Wall fragment. Key meander pattern above female drapery on outer face. Light reddish-brown ware (5YR6/4), hard fired.

9.7.1.3.5. Column Kraters (Nos. 751–752)

A fragment with a band of linked lotus buds connected to each other (751) seem to be the upper wall of a column krater. In the Athenian Agora, a similar decorated vessel was dated to the late 6th century BCE (Moore and Philippides 1986:167, pl. 48:517). At Tell el-Hesi the type was dated to the 1st half of the 5th century BCE (Bennett and Blakely 1989:99, fig. 93:44).

Date range: late 6th – mid-5th cents. BCE

751 Krater

Reg. No. 79/Y/68/273B; Area Y, Sq. X12, Locus L–1, Bucket 120

Wall fragment. Band of linked lotus buds connected to each other on outer face. Light reddish-brown ware (5YR6/4), hard fired.

752 Krater

Reg. No. 79/Y/68/274; Area Y, Sq. X12, Locus L-3, Bucket 144

Wall fragment. Unidentifiable theme on outer face. Light reddish-brown ware (5YR6/4), hard fired.

9.7.1.3.6. Lekythoi (Nos. 753–755)

Similar lekythoi were found in the Athenian Agora dated to the 3rd quarter of the 5th century BCE (Moore 1997:257, pl. 86:837).

Period: Late Persian

753 Lekythos

Reg. No. 79/A/56/299; Area A

Base diam.: 6; Max h.: 3.2

High foot. Concentric rosette pattern in black on clay color background, on outer face. Light reddish-brown ware (5YR6/4), hard fired.

754 Lekythos

Reg. No. 79/A/71/187; Area A, Bucket 553

Base diam.: 2; Max h.: 4

Rounded base. Meander pattern on outer face. Light reddish-brown ware (5YR6/4), hard fired.

755 Lekythos

Reg. No. 79/A/73/177; Area A, Bucket 236

Wall fragment. Temple(?) façade, on outer face. Light reddish-brown ware (5YR6/4), hard fired.

9.7.1.3.7. Miscellaneous (Nos. 756–758)

756 Vessel

Reg. No. 79/Y/68/286; Area Y, Sq. Y13, Locus L-21, Bucket 160

Wall fragment. Black thin lines and red glazed area on a clay color background on outer face. Reddish-yellow ware (2.5YR6/6), hard fired.

757 Vessel

Reg. No. 79/A/56/272; Area A, Sq. H.5

Wall fragment. Female chiton or himation drapery (?) on outer face. Light reddish-brown ware (5YR6/4), hard fired.

758 Vessel

Reg. No. A/71/B40.1; Area A, Sq. I4, Bucket 40

Wall fragment. Wreathed head of a female to left on outer face. Reddish-yellow ware (5YR6/6), many small black grits, hard fired.

9.7.2. Hellenistic Imported Ware

9.7.2.1. Attic Black Glazed Ware

The last development of the Attic ware was the black glazed vessel that can be considered a final stage before the appearance of the Hellenistic red glazed table ware. Rotroff, who examined the changes in ware and glaze quality throughout the Athenian Agora repertoire, realized and documented the transformation from the black glazed to the red glazed ware. About 60% of the Early Hellenistic pots have been successfully fired an even black. After 150 BCE this figures drops below 50% and more vessels were glazed red and brown.

Two tone vessels of black and red were particularly popular from the late 4th to the early 3rd century BCE. They were fired in different colors above and below a stacking line on the exterior and often have a stacking circle on the floor.

There were also striking changes in the surface of the glaze. In the 4th century a shiny or lustrous glaze was popular. After 250 BCE the surface was either metallic or dull. The metal affect was probably inspired by metal ware. A dull surface occurred on about a third of the pots made in the 3rd–2nd century BCE and in the 1st century it became much more common (Rotroff 1997:10–11).

The distribution of the black glazed ware throughout the eastern Mediterranean and particularly in the Coastal Plain of Israel was wide. For example, in Apollonia the Attic ware represented 54.05% of the imported ware in the Early Persian level and 76.19% in the Late Persian level (Tal 1999:105, 130). The 1st to catalog the evidence was Clairmont who believed that in the course of time Alexandrian potters as well as other eastern Mediterranean workshops established their own industry on the basis of Attic prototypes (Clairmont 1956:1–2).

The Jaffa repertoire greatly resembles Clairmont's catalog and includes various fabrics that could have been of Attic origin or its Eastern imitations. The Jaffa assemblage is unique in quantity, quality, and diversity of types in comparison with other published material from sites in Israel. It particularly includes bowls, plates and cups well known from the Athenian Agora. Closed vessels such as various kinds of jugs and juglets are rare in Jaffa and represented only by a few lekythoi fragments (810–812). In Jaffa, the proportion between closed and open forms are rather radical but typical of the Near East. A high proportion of skyphoi kylix, lekythoi, bowls, cups and plates and a low proportion of oinochoai, hydria and amphora are known from many sites such as Tell el-Hesi, Tel Michal, Samaria, and Apollonia. The picture presented above can suggest that the import of Attic ware was not for their contents but rather for the use of the Greek soldiers and local inhabitants who had learnt to appreciate the luxurious way of living.

9.7.2.1.1. Unglazed Thickened Edge Plates (Nos. 759–760)

Broad rim, convex on top and angular at junction with flat floor. The plate is characterized by the broad rim edge, and is grooved on the upper part. Low ring base. The ware is of high quality, but for unknown reasons during the Classical period it was unglazed. The type was considered a peculiar unglazed type that was used for serving food and had a common Corinthian shape.

These distinctive plates were found in mid-5th century BCE contexts in the Athenian Agora and were produced for more than a century (Sparkes and Talcott 1970:145–6, fig. 9:1011–1021). Rotroff's studies proved the existence of the type until the Early Hellenistic period (Rotroff 1997:142, fig. 45:623–624). Throughout the Early Hellenistic period dull glazed plates were in use, sometimes with a rouletted decoration or stamped palmette, or with an overprinted decoration (Rotroff 1997:143, nos. 625–630). In Jaffa, the unglazed type was found, consisting of one complete plate (759) and a rim fragment (760). Plates similar to the Jaffa examples were dated in the Athenian Agora to the early 4th century BCE.

Date range: early 4th cent. BCE

759 Plate

Reg. No. 79/A/71/190; Area A, Sqs. H2–I2, Bucket 607

Rim diam.: 15.5; Base diam.: 9; Max h.: 2

Projecting rim hanging down at lip with two grooves on external face, carinated wall, high ring base. Pink ware (5YR7/4), hard fired.

760 Plate

Reg. No. A/71/B566; Area A, Sq. H2

Rim diam.: 17; Max h.: 1.5

Projecting rim hanging down at lip with two grooves on external face, carinated wall. Pink ware (5YR7/4), hard fired.

9.7.2.1.2. Thickened Rim Bowls (Nos. 761–765)

In Jaffa, a few examples of bowls with rounded wall and thick molded rim were recovered. The shape seems to be an early version of the outcurved profile bowls, which in the next stage of development received a more concaved wall (Sparkes and Talcott 1970:128–9) (777–785). In the Athenian Agora they were dated to the

late 5th century and described as an experiment to produce a more stable version of the contemporary stemmed dishes.

Examples with a round thickened rim and fine homogenous glaze were found (761–764). One example with a concentric ovolo decoration on the floor was in use not after 390–380 BCE. In the Athenian Agora as well as in Dor, the pattern was dated to the late 5th century (Sparkes and Talcott 1970:30, 128, fig. 8:779, 430 BCE; Marchese 1995:129, fig. 4.3:2, 8) (761). At Samaria, a complete bowl with ovule and linked palmette was dated to the 4th century (Crowfoot et al 1957, fig. 48:1). Another example had a molded rim and sparkling black glaze (763). A similar rim fragment was found at Dor and dated to the late 5th century BCE (Marchese 1995:129, fig. 4.3:9).

More parallels were found at Tell el-Hesi (Bennett and Blakely 1989:121–2, fig. 85:190), Apollonia (Tal 1999:162, fig. 4.42:6) and Akko (Dothan 1976:26, fig. 27:11). No. 765 was dated at Tel Michal to the 1st century BCE (Marchese 1989:147, 150, fig. 10.2:7).

Date range: late 5th – 4th cents. BCE

761 Bowl

Reg. No. 79/Y/68/264; Area Y, Sq. Y14, Locus L–11, Bucket 123

Rim diam.: 20; Max h.: 5

Thickened and slightly outcurved rim, rounded wall. Concentric pattern of egg and dart pattern on outer face. Reddish-brown ware (2.5YR5/4), hard fired.

762 Bowl

Reg. No. 79/Y/64/107; Area Y, Sq. 8, Locus 613, Bucket 104

Rim diam.: 22; Max h.: 4.5

Thickened rim, rounded wall. Yellowish-red ware (5YR5/6), black glaze, hard fired.

763 Bowl

Reg. No. 79/A/71/185; Area A, Sq. J2, Bucket 585

Rim diam.: 21; Max h.: 4.8

Thickened rim, grooved below external lip, rounded wall grooved on external face, near base. Yellowish-red ware (5YR5/6), black glaze, hard fired.

764 Bowl

Reg. No. 79/A/56/165; Area A, Sq. H7

Rim diam.: 16; Max h.: 3

Thickened rim, rounded wall. Light reddish-brown ware (2.5YR6/4), black glaze, hard fired.

765 Bowl

Reg. No. A/71/B310; Area A, Sq. I3, Bucket 310

Rim diam.: 13; Max h.: 3.5

Thickened rim, slightly outcurved, rounded wall. Reddish-yellow ware (5YR6/6), black glaze, many minute black grits, hard fired.

9.7.2.1.3. Outcurved Rim Bowls (Nos. 766–772)

Outcurved rim, projecting and sometimes flaring, curved wall, ring base.

This was one of the most common shapes in the Hellenistic period. In the Athenian Agora their number is almost twice than the incurved rim bowls. It was suggested that echinus bowls were preferred during the 3rd century, and around 225 BCE the popularity of the outcurved bowl began to increase quickly (Rotroff 1997:156). At Dor, it was the most popular shape among the black glazed bowls, and account for 71 sherds (Marchese 1995:129, fig. 4.2). Similar proportions appeared at Tell el-Hesi and Apollonia. Rotroff described their chronological typology and defined three subtypes according to their manufacture and glazing quality as Classical, Hellenistic and semi-glazed. They succeeded one another but with a chronological overlap. Above, the semi-glazed subtype will be described separately among the “Local Red Slip” ware.⁷⁵

⁷⁵ In the early 3rd century the rim was flared and in its late part the bowls became deeper and the glazing rather dull. The 2nd century bowls were small with an angular profile. They do not appear later than 150 BCE (Rotroff 1997:156–158, fig. 61:866–904).

Classical Subtype

Projecting rim and stamped decoration. They are characterized by lustrous black slip and reserved resting ring base, which is characteristic of the 4th century BCE. Like the incurved bowl, the ring base has a nipped underside.

Most of the Jaffa bowls are of high quality and have a stamped decoration on the floor. Their profile seems to be of the early stage of development dated to the 4th century even though they lack the nipped underside. The earlier examples have an undecorated floor, and according to the decoration of circles and concentric dots on the underside, they can be dated to 400–380 BCE (766) (Sparkes and Talcott 1970:128–9, fig. 8:802–803). The bowl, which was coated with high quality black glaze and linked palmette (768), was dated in the Athenian Agora from the early to the mid-4th century BCE (Sparkes and Talcott 1970:128–9, pl. 58:805; Rotroff 1997:156–7, fig. 59:866–8). The four free palmette decorated bowls (767) appeared according to the Athenian Agora's repertoire until around 300 BCE (Sparkes and Talcott 1970:128–9, pl. 58:804). The 3rd century bowls had a flared rim and a more carinated wall (771) (Rotroff 1997:158–9, fig. 60:905–949), and some of them had a rouletted decoration dated to 300–275 BCE (769–770) (Rotroff 1997:157–8, fig. 59:869–870, 872–875).

In Israel, the type appeared during the 4th century in Apollonia (Tal 1999:162, fig. 4.42:7), Dor (Marchese 1995:129, fig. 4.2:1–6, photo 4.9), Tell el-Hesi (Bennett and Blakely 1989:121, figs. 79:182; 80:184, 186), and Samaria (Crowfoot et al 1957:245, fig. 48.1–5).

Date range: 4th–3rd cents. BCE

766 Bowl

Reg. No. 79/Y/68/312; Area Y, Sq. X12, Locus L–1, Bucket 124

Rim diam.: 14.4; Base diam.: 8.6; Max h.: 4.4

Outcurved rim, rounded wall, ring base. Three black glazed concentric circles on brown-red background on the underside. Reddish-gray ware (5YR5/2), black glaze, hard fired.

767 Bowl

Reg. No. 79/A/73/113; Area A, Locus 1001, Bucket 38

Rim diam.: 13.7; Base diam.: 9; Max h.: 4

Outcurved rim, carinated wall, ring base. Stamped pattern of free palmettes bordered by concentric rouletted pattern, on floor. Reddish-yellow ware (5YR6/6), black glaze, hard fired.

768 Bowl

Reg. No. 79/A/70/152; Area A, Sq. K3, Locus 508, Bucket 273

Rim diam.: 14.5; Base diam.: 9; Max h.: 5

Outcurved rim, rounded wall, ring base. Palmette pattern linked by two concentric lines on floor. Reddish-brown ware (5YR5/4), black glaze, hard fired.

769 Bowl

Reg. No. 79/Y/64/087; Area Y, Sq. 1, Locus 601, Bucket 27

Rim diam.: 13.5; Base diam.: 8; Max h.: 5.5

Outcurved rim, rounded wall, high ring base. Two concentric rouletted pattern on floor. Light reddish-brown ware (5YR6/4), black glaze, hard fired.

770 Bowl

Reg. No. 79/Y/64/069; Area Y, Sq. 7, Bucket 102

Rim diam.: 19; Max h.: 3

Outcurved rim, rounded wall, ring base. Concentric rouletted pattern on floor. Yellowish-red ware (5YR5/6), a few small black grits, black glaze, hard fired.

771 Bowl

Reg. No. C/65/639; Area C, Sq. CC102, Locus 449, Bucket 1009

Rim diam.: 10.5; Max h.: 2.2

Outcurved rim, rounded wall, ring base. Concentric rouletted pattern on floor. Reddish-yellow ware (5YR7/6), black glaze, a few minute white grits, medium fired.

772 Bowl

Reg. No. C/65/B1038.1; Area C, Sq. DD103, Locus 456

Rim diam.: 13.5; Max h.: 2.2
 Outcurved rim. Black glaze, hard fired.

9.7.2.1.4. Echinus Bowls

Incurved rim, rounded wall and ring base.

The echinus-shaped bowls (Rotroff 1997:161) originated in the Classical period and appeared in a wide range of sizes, from 9–27 cm. They were one of the two most popular bowls and were probably used for individual food servings like the outcurved rim bowl. They were divided into four subtypes according to the Athenian Agora repertoire: Classical, Hellenistic, the Deep, and the Large. The Small type was treated separately as a Saltcellar (Rotroff 1997:161–8).

In Jaffa, the Classical type was well represented as well as the saltcellar type.

Classical Type (Nos. 773–777)

The shallower version was common in the 4th century and appeared with a stamped decoration on the floor. A deeper version appeared at the 3rd century BCE (Rotroff 1997:161–2, fig. 62:965–982). The base was usually plump and convex on the outside.

The Jaffa example can be dated from the late 4th to the early 3rd century BCE. Two bowls have the typical nipples underside that characterized the early type before 275 BCE (774, 776). Remains of the rouletted decoration appear on three examples. They could have been influenced by the linked palmette bowls that were in common use until 325 BCE in the Athenian Agora. One example is particularly wide with a 26 cm diameter (773). The slip is rather dull but the bowls have the nipples base and the concentric rouletted decoration on the floor. In the Athenian Agora the type was dated to the mid-4th century BCE (Sparkes and Talcott 1970:131, fig. 8:829). At Samaria, similar bowls were dated to the 3rd century BCE (Crowfoot et al 1957:250, fig. 49:5).

The echinus bowl is considered one of the most common Attic types in Israel during the 4th century and particularly along the Coastal Plain. At Dor, the incurved bowls are the second most popular black glazed vessels (48 sherds). Most of them belong to the Classical type with a nipples base and are decorated with rouletted and linked palmettes (Marchese 1995:129, fig. 4.1:1–8). They also appeared at Tel Michal during the late 4th century BCE (Marchese 1989:147, 150, fig.10.2:1), Apollonia (Tal 1999:162, fig. 4.42:14–15), Ashdod (Dothan 1971:115, fig. 60:18) and Alexandria (Clairmont 1956:15–16, pl. IV:485, 489–490,492). A few examples were found at Tel Keisan (Nodet 1980:126, pl. 22:9). At Tell el-Hesi the incurved rim bowls were common from the mid-5th until the 4th century BCE (Bennett and Blakely 1989:123, nos. 206–211).

Date range: 4th–early 3rd cents. BCE

773 Bowl

Reg. No. 79/A/56/216; Area A, Sq. H6

Rim diam.: 26; Base diam.: 10; Max h.: 9

Incurved rim, rounded wall, ring base with grooved resting surface. Rouletted pattern on floor, black glaze, hard fired.

774 Bowl

Reg. No. 79/A/56/158; Area A, Sq. F.9

Rim diam.: 12; Base diam.: 9; Max h.: 1.9

Incurved rim, ring base nipples on underside. Light reddish-brown core (5YR6/4), black glaze, hard fired.

775 Bowl

Reg. No. 79/A/70/155; Area A, Sq. J3, Locus 504, Bucket 155

Rim diam.: 12.5; Max h.: 3.2

Incurved rim, rounded wall, ring base. Concentric rouletted pattern on floor. Light reddish-brown core (5YR6/4), black glaze, hard fired.

776 Bowl

Reg. No. 79/A/56/162; Area A, Sq. I8

Rim diam.: 9; Base diam.: 7.5; Max h.: 4

Incurved rim, rounded wall, ring base with grooved resting surface (nipped). Concentric rouletted pattern on floor. Yellowish-red ware (5YR5/8) ware, black glaze, hard fired.

777 Bowl

Reg. No. 79/A/73/120; Area A, Bucket 48

Rim diam.: 12; Base diam.: 7; Max h.: 3.6

Incurved rim, rounded wall, ring base. Concentric rouletted pattern on floor. Reddish-yellow ware (5YR6/6), black glaze, hard fired.

9.7.2.1.5. Saltcellars (Nos. 778–783)

These are smaller bowls. The diameter is usually 7–8 cm. They probably served for the individual use of salt or other condiments and were named according to the Athenian Agora repertoire as “Saltcellar” (Sparkes and Talcott 1970:132, nos. 890–956; Rotroff 1997:167, fig. 65, nos. 1075–1089). The saltcellar was in common use from the early 5th century and did not survive beyond 250 BCE.

In Jaffa, three subtypes were recovered.

A. Echinus Type (Nos. 778–779)

The earliest type has a very heavy wall and thick rim and was dated to the early 5th century. In the mid-5th century it developed toward a lighter type with a plain slightly flattened rim, a thinner wall of the same thickness as the rim, and a ring base with concaved molding on the inner face.

The Jaffa examples can be considered a later stage with a reserved underside (778) or decorated with a circular black band and central dot (779), dated in the Athenian Agora to 425–400 BCE (Sparkes and Talcott 1970:134, nos. 863–876). The type appeared from the mid/late 5th to the late 4th century BCE at Tell el-Hesi (Bennett and Blakely 1989:124–5, fig. 73:216), Apollonia (Tal 1999:162, fig. 4.42:16), and Antioch (Clairmont 1956:16, pl. IV:500).

B. Box (No. 780)

Flared rim, concaved wall terminating in a high flared foot. A single complete vessel was found in Jaffa. The type rare in Israel and was dated in Athenian Agora to 425 BCE (Sparkes and Talcott 1970, fig. 9:932). Other examples were found in Kition dated to the 5th and 4th century BCE (Jehasse 1981:83, pl. XLVI:22–23) and in Beirut in the 4th century BCE context (Clairmont 1956:10, pl. 11:418).

C. Concaved Wall (Nos. 781–782)

The rim is broad and inclined toward the inner face, the wall is concaved and has a recessed underside. This type was dated in the Athenian Agora to the 4th century BCE (Sparkes and Talcott 1970:136–7, no. 949). The type continued to be in use until the end of the 4th century BCE (Rotroff 1997:165–6, fig. 65:1064–1066).

The Jaffa examples seem to be typical early 4th century examples with a more pronounced curved wall and a reserved underside. Similar bowls were found at Tel Mevorakh (Johnson 1978:40, pl. 29:19) and in Beirut (Clairmont 1956:16, pl. IV:493, 501).

D. Footed Base (No. 783)

Heavy wall, thickened and sharply incurved near the top and becomes thin and very sharp at the lip, a relatively broad ring base that defines them as “footed” bowls (Sparkes and Talcott 1970:137, nos. 939–950).

The Jaffa examples can be identified as the later development with a thinner ring base, sometimes nipped on the underside. In the Athenian Agora they were dated to the 2nd and 3rd quarters of the 4th century BCE

(Sparkes and Talcott 1970:137, nos. 939–950) and even later in the last quarter of the 4th century BCE (Rotroff 1997, nos.1075–1083).

In Jaffa, one example was found that can be defined as the later development with a thin uniform wall, sharp incurved rim and flared ring base. The slip is rather poor, dull and not uniform (783). This subtype was dated in the Athenian Agora to around 275 BCE (Rotroff 1997:167, fig. 65:1083–1089). At Samaria, it was dated from the late 4th to the early 3rd century BCE (Crowfoot et al 1957:250, fig. 49:4).

Date range: mid-5th – mid-3rd cent. BCE

778 Bowl

Reg. No. 79/A/70/153; Area A, Sq. K4, Bucket 200

Rim diam.: 7.5; Base diam.: 6; Max h.: 2.5

Incurved rim, rounded wall, ring base. Black concentric circles on clay color background on underside.

Light reddish-brown ware (5YR6/4), black glaze, hard fired.

779 Bowl

Reg. No. 79/A/56/275; Area A, Sq. D.9

Rim diam.: 9; Base diam.: 7; Max h.: 3

Incurved rim, rounded wall, ring base. Two black concentric circles inside red circle on base of underside.

Reddish-yellow ware (5YR6/6), black glaze, hard fired.

780 Bowl

Reg. No. 79/C/71/046; Area C

Rim diam.: 7.5; Base diam.: 7; Max h.: 3

Horizontal grooved rim, concaved wall flaring toward ring base. Concentric circles on the underside.

Yellowish-red ware (2.5YR5/6), black glaze, hard fired.

781 Bowl

Reg. No. 79/A/73/129; Area A, Bucket 81

Rim diam.: 7; Base diam.: 5; Max h.: 3.3

Incurved rim, rounded wall, ring base. Reddish-yellow ware (5YR6/8), black glaze, hard fired.

782 Bowl

Reg. No. 79/D/63/069; Area D, Bucket 43

Rim diam.: 6; Base diam.: 5; Max h.: 3

Incurved rim with pointed lip, rounded wall, ring base, nipped on underside. Light reddish-brown

ware(5YR6/4), black glaze, hard fired.

783 Bowl

Reg. No. 79/A/71/178; Area A, Sqs. I3–I4, Bucket 256

Rim diam.: 7.5; Base diam.: 3.7; Max h.: 3.7

Incurved rim, rounded wall, ring base. Reddish-yellow core (7.5YR7/6) and dull brown slip (5YR4/3) dripping toward the base, unglazed underside. Hard fired.

9.7.2.1.6. Convex–Concave Profile Bowl (No. 784)

Convex wall with a reserved groove on the mid-outer face over a sharp ledge that created the concaved lower profile toward the foot. Ring base with reserved underside decorated with glazed circles and dot. The shape first appeared in the late 5th century and was most likely manufactured in a single workshop (Sparkes and Talcott 1970:130–1).

The Jaffa example is hard to classify since it lacks the upper part and rim (784). The relatively thin wall and ring base seem to characterize the late stage of development and can be dated to the late 4th century BCE (Sparkes and Talcott 1970:131, fig. 8:821). The type were found within an Early Persian context at Akko (Dothan 1976:26–7, fig. 27:9). The late version that was dated to the 4th century BCE was found at Dor (Marchese 1995:131, fig. 4.3:4) and Samaria (Crowfoot et al 1957:251, fig. 50:1). At Tell el-Hesi it seems to be one of the most common types throughout the Late Persian levels (Bennett and Blakely 1989:122, nos. 193–205).

Date range: late 4th cent. BCE

784 Bowl

Reg. No. A/70/B284.1; Area A, Sq. K3, Bucket 284

Base diam.: 8; Max h.: 2.5

Grooved lower wall, ring base. Two concentric black bands on underside. Reddish-brown core (5YR5/4), black glaze, hard fired.

9.7.2.1.7. Stemless Cups (Nos. 785–786)

Plain rim with flange on outer face, rounded wall.

The type was defined at the Athenian Agora as a stemless cup dated to the end of the 5th century BCE (Sparkes and Talcott 1970:101, nos. 470–473). At Apollonia, a rim fragment was found that was identified as a lekane dated from the late 6th to the mid-5th century BCE (Tal 1999:106, fig. 4.14:5). However, the Jaffa vessel seems similar to it. At Kition, the type was dated to the 5th and 4th century BCE (Jehasse 1981:95–6, pl. lv:14).

Date range: 5th cent. BCE

785 Bowl

Reg. No. A/71/B40.2; Area A, Sq. I4, Bucket 40

Rim diam.: 19; Max h.: 4

Vertical rim, ledge below rim, rounded wall. Reddish-yellow core (5YR6/8), black glaze, many small black grits, hard fired.

786 Bowl

Reg. No. 79/Y/68/263; Area Y, Sq. X12, Locus L–1, Bucket 11

Rim diam.: 16.8; Max h.: 3

Vertical rim, ledge below rim, lug handle. Light reddish-brown ware (5YR6/4), black glaze, hard fired.

9.7.2.1.8. Projecting Rim Plates (Nos. 787–789)

Shallow bowl. Broad shelf rim, projecting and nearly horizontal in shape.

Imitation of Attic Classical type that first appeared in the late 5th century in the Athenian Agora and became popular from the 4th to the early 3rd century BCE (Sparkes and Talcott 1970, fig. 9:879–881). They stopped being produced around 275 BCE (Rotroff 1997:165, fig. 64:1045–1049).

The Jaffa examples seem to belong to the early stage of development. One piece bears a rouletted decoration with free palmettes that characterized the 4th century BCE (787). Another plate of a very high quality glaze and reserved resting base without a nipple seems to be dated to the late 4th century BCE (788). More examples appeared in Dor during the late 5th century BCE (Marchese 1995:129, fig. 4.3:1) and in the 4th century BCE in Kition (Jehasse 1981:83, pl. liii:40).

Date range: 2nd half of 4th cent. BCE

787 Plate

Reg. No. 79/A/56/156; Area A, Sq. I8

Base diam.: 8.7; Max h.: 4

Flat projecting rim, rounded wall, ring base. Roulette decoration with free palmette pattern. Yellowish-red core (5YR5/6), black glaze, hard fired.

788 Plate

Reg. No. 79/A/70/142; Area A, Sq. K4, Bucket 220

Rim diam.: 16.5; Base diam.: 9.2; Max h.: 3.5

Flat projecting rim, rounded wall, ring base. Reddish-yellow core (5YR6/8), hard fired.

789 Plate

Reg. No. A/71/B358; Area A, Sq. I6, Bucket 358

Rim diam.: 14; Max h.: 2.5

Flat projecting rim, rounded wall, ring base. Pale brown core (10YR6/3), black glaze, hard fired.

9.7.2.1.9. Fish Plates (Nos. 790–794)

The Fish Plate was named for the fish and other sea creatures that decorated the red figured examples. They were first in use in Athens at the end of the 5th century BCE and continued to appear well into the Hellenistic period. The Attic fish plate is a broad plate with overhanging rim and a depression in the center of the floor that served to collect broth or hold seasoning or relish. There is almost always a groove around the depression and on the outer edge near the rim. The ring base was usually convex on the exterior.

From the late 3rd to the early 2nd century BCE the Fish Plate tended to be deeper and with a more concaved floor, and the wall thinner. The most distinctive development occurred in the rim angle, which softened during the 3rd century and after 225 BCE joined the floor in a continuous curve. The central depression also changed and became smaller and shallower over time.

The Jaffa examples seem to be of an early stage of development, and the thickened flat and beveled wall is dated from the 4th to the mid-3rd century BCE. The nipped base, which characterizes most of them (790, 792–793), and the reserved resting surface of plate no. 791 are indications of a late 4th to the early 3rd century BCE date (Rotroff 1997:147, figs. 50:709–715; 51:716; Sparkes and Talcott 1970:310, fig. 10:1072–1076). More examples were found at Dor (Marchese 1995:131, fig. 4.5:4–6), Akko (Dothan 1976:26–7, fig. 27:6), and Tel Michal (Marchese 1989:147, 150, fig. 10.2:4).

Date range: late 4th – early 3rd cents. BCE

790 Fish plate

Reg. No. 79/A/70/145; Area A, Sq. K3, Bucket 144

Rim diam.: 23.5; Base diam.: 13; Max h.: 4

Overhanging rim creating sharp angle on inner face, straight heavy wall, central depression, ring base with grooved resting surface. Light reddish-brown core (5YR6/5), black glaze, hard fired.

791 Fish plate

Reg. No. 79/A/72/130; Area A, Sq. L3, Bucket 305

Rim diam.: 18.5; Base diam.: 10; Max h.: 3

Overhanging rim creating sharp angle on inner face, straight heavy wall, central depression, ring base. Reddish-yellow core (5YR6/6), black glaze, hard fired.

792 Fish plate

Reg. No. 79/A/73/112; Area A, Bucket 6

Rim diam.: 15.5; Base diam.: 9; Max h.: 2.5

Overhanging rim creating sharp angle on inner face, straight heavy wall, central depression, ring base with grooved resting surface. Reddish-yellow core (5YR6/6), black glaze, hard fired.

793 Fish plate

Reg. No. A/72/B94.1; Area A, Bucket 94

Base diam.: 9; Max h.: 2.5

Flat floor with central depression grooved around in reserved surface. High and heavy nipped ring base. Yellowish-red core (5YR5/6), black glaze, hard fired.

794 Fish plate

Reg. No. A/71/B142.3; Area A, Sq. I3, Bucket 142

Rim diam.: 23; Max h.: 2

Overhanging rim creating sharp angle on inner face, straight heavy wall. Red core (2.5YR6/8), black and red slip, hard fired.

9.7.2.1.10. Rolled Rim Plates (Nos. 795–800)

Rolled rim plates were made by turning the lip inward and upward, and have a thickened almost horizontal wall and ring base.

The type first appeared in the Athenian Agora in the early 4th century BCE and was the most popular type in Attica during the Hellenistic period. At other Hellenistic sites such as in Israel the Fish Plate was more common.

The rolled rim plate dated before 200 BCE always bears a concentric stamped decoration on the floor that is usually free palmettes decoration within a rouletted pattern or a roulette pattern alone. The plate was made in various sizes according to chronological order: the smaller ones (diam. 12–15 cm) were more typical of the early stage dated to the mid-4th century and the larger ones (diam. 16–26 cm) became more popular during the 3rd century BCE (Rotroff 1997:142–3).

The earlier 4th century type, with the concave molding below the external rim is absent from Jaffa (Sparkes and Talcott 1970:147, fig. 10:1047–1057). In Jaffa, four small plates with a rouletted decoration were found (795–798). Their profile and size are typical of the early 3rd century BCE, as described by Rotroff: “Concaved–convex–concaved profile, grooved below external wall” (Rotroff 1997:144, fig. 46:645–6, 650). Two relatively large undecorated plates also should be dated to the early 3rd century BCE (799–800) (Rotroff 1997, fig. 46:648–653).

Date range: early 3rd cent. BCE

795 Plate

Reg. No. 79/A/55/107; Area A, Locus B

Rim diam.: 16.5; Base diam.: 11.5; Max h.: 3.5

Thick rolled rim, slightly concaved heavy wall, ring base, concentric rouletted pattern on floor and incised graffiti on underside. Yellowish-red core (5YR5/6), black glaze, hard fired.

796 Plate

Reg. No. 79/A/55/109; Area A, Sq. G.7, Locus 6B

Rim diam.: 16.5; Base diam.: 11.5; Max h.: 2.7

Thick rolled rim, slightly concaved heavy wall, ring base. Concentric rouletted pattern on center of floor. Reddish-yellow core (5YR6/6), black glaze, hard fired.

797 Plate

Reg. No. 79/A/73/121; Area A, Bucket 48

Rim diam.: 15.5; Base diam.: 10; Max h.: 2.9

Rolled thickened rim, ring base. Concentric rouletted pattern bordering palmette pattern, on floor. Reddish-yellow core (5YR6/6), black glaze, hard fired.

798 Plate

Reg. No. 79/A/71/181; Area A, Sq. I2–I3, Bucket 548

Rim diam.: 18; Base diam.: 12.5; Max h.: 2.5

Rolled rim, grooved outside straight wall, ring base. Concentric rouletted pattern on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

799 Plate

Reg. No. 79/A/71/186; Area A, Sq. I4, Bucket 743

Rim diam.: 25.6; Base diam.: 15; Max h.: 4

Rolled thickened rim, grooved on external face, horizontal wall, ring base. Yellowish-red core (5YR5/6), black glaze, hard fired.

800 Plate

Reg. No. A/71/B142.2; Area A, Sq. I3, Bucket 142

Rim diam.: 24; Base diam.: 14.5; Max h.: 3.5

Rolled thickened rim, grooved on external face, horizontal wall, ring base. Red core (2.5YR6/6), black glaze, hard fired.

9.7.2.1.11. Skyphoi

The Athenian skyphos was adapted from the Corinthian tradition and was the most common drinking vessel in Athens from the 6th to the 4th century BCE. The traditional skyphos is a deep cup with thin wall, plain rim, ring base and two horizontal handles attached to the rim. It was produced in two main versions: the Corinthian type that was very close in shape and decoration to its prototype, and the Attic type that developed mainly in the 5th century and was popular at sites in Israel. In Jaffa, the Attic type is attested.

The Attic Type (Type A) (Nos. 801–806)

Relatively thick wall, heavy torus foot, thick strong handles and complete black glaze. The earlier 5th century examples were characterized by the incurved rim (Sparkes and Talcott 1970:84, fig. 4:335–6) while the later examples, dated from the mid-5th to the early 4th century BCE had a double curved wall with a more flared rim. Thick horseshoe shaped handles were attached below the rim, a position forced by the outcurved rim (Sparkes and Talcott 1970:84, fig. 4:342, 349).

The two Jaffa rims with outcurved shape no doubt belong to the later development of the Attic type (801–802). The bases with reserved underside and one or two glazed circles with or without a central dot is a normal Attic feature that was never abandoned (803–804). One base (806) of a very narrow diameter seems to belong to a variant that was dated in the Athenian Agora to 330 BCE (Sparkes and Talcott 1970:86, fig. 4:352). The Type A skyphos was one of the most common Attic vessels in Israel during the 5th century BCE. At Apollonia, it represented 50% of the Attic imports from the middle to the late 4th century (Tal 1999:106, fig. 4.14:6–7; 131, fig. 4.27:12–20). At Tell el-Hesi, the rims and bases were recovered in large quantities (Bennett and Blakely 1989:111, figs. 68:103; 71:105) and in Dor it was the most common type during the 5th and 4th century BCE (100 sherds) (Marchese 1995, Table 4.2; fig. 4.4:3–7). According to the Clairmont assemblage, the type was well represented in Antioch, Cairo, Tell Jemmeh, Ashkelon and Tel Abu Hawam during the 1st half of the 5th century BCE (Clairmont 1956:19, nos. 542–549). More examples were found in Shiqmona (Elgavish 1968:46, pl. LII:124), Akko (Dothan 1976:27, fig. 27:3–4), Tel Michal (Marchese 1989:147, 150, fig. 10.2:8–10) and Samaria (Crowfoot et al 1957: 214, fig. 35.2). The appearance of many bases in Jaffa seems to be an additional proof of the popularity of the skyphoi in Israel.

Date range: 5th–4th cents. BCE

801 Skyphos

Reg. No. 79/A/71/230; Area A, Sq. I3, Bucket 197

Rim diam.: 14.5; Max h.: 3.7

Flared rim and wall. Two horizontal loop handles attached to rim. Red core (5YR5/6), black glaze, hard fired.

802 Skyphos

Reg. No. 79/Y/64/106; Area Y, Sq. 6, Bucket 81

Rim diam.: 12; Max h.: 2.5

Flared rim and wall. Two horizontal loop handles attached to rim. Red core (5YR5/6), black glaze, hard fired.

803 Skyphos

Reg. No. 79/C/71/045; Area C, Bucket 9

Base diam.: 10; Max h.: 3

Ring base. Concentric brown and red circles on the underside. Red core (2.5YR6/6), hard fired.

804 Skyphos

Reg. No. 79/Y/64/072; Area Y, Sq. 7, Bucket 102

Base diam.: 7; Max h.: 3

Ring base. Two concentric circles and dot in the center, on the underside. Yellowish-red core (5YR5/6), yellowish-red internal face (2.5YR5/6) and black glaze on external face, hard fired.

805 Skyphos

Reg. No. 79/Y/68/283; Area Y, Sq. Y13–Z13, Locus L–16, Bucket 77

Base diam.: 10; Max h.: 3

Ring base. Three white parallel lines on lower outer face and red slip on underside. Yellowish-red core (5YR5/6), black glaze, hard fired.

806 Skyphos

Reg. No. 79/Y/68/262; Area Y, Sq. X12, Locus L-1, Bucket 11

Base diam.: 5.3; Max h.: 3.5

Ring base. Reddish-yellow core (5YR5/3), dark brown glaze (7.5YR3/2), many small white grits, hard fired.

9.7.2.1.12. Kantharoi

The traditional Classical Greek kantharos is dated to the 6th–5th centuries BCE and is uncommon in Israel. However, according to the Clairmont assemblage, they are numerous in Near Eastern collections and well known in Alexandria during the 4th century BCE (Clairmont 1956:20, pl. VI:554–559). During that period, hybrid types of kantharoi were developed that are derivatives of the heavy walled skyphos. Those kantharoi can be divided into two subtypes.

A. Molded Rim (No. 807)

The early version, which is dated to the 4th century, has a molded rim, flaring wall with sharp carination on the lower part, high ring base and two spurred horizontal handles (Sparkes and Talcott 1970:122, fig. 7:704–769). In Israel, the type was found in Samaria in the late 4th century BCE (Crowfoot et al 1957:242–3, fig. 46:1–2).

B. Plain Rim (Nos. 808–809)

The late version dated to the 2nd half of the 4th century BCE has a plain outcurved rim, and the spurred handles became longer with straightened sides and squared ends (Sparkes and Talcott 1970:122, fig. 7:706–714). In Israel, the type appeared in Samaria during the 3rd century BCE (Crowfoot et al 1957:242–3, fig. 46:3–4).

Date range: mid-4th to 3rd cents. BCE

807 Kantharos

Reg. No. 79/Y/68/269; Area Y, Sq. X12, Locus L-1, Bucket 11

Rim diam.: 13; Max h.: 4.5

Rounded rim with ledge below rim on outer face. Yellowish-red core (5YR5/6), black glaze, hard fired.

808 Kantharos

Reg. No. A/71/B21; Area A, Sq. I4, Bucket 21

Rim diam.: 9; Max h.: 2.3

Flared rim and wall, elongated spurred handle attached to rim. Reddish-yellow core (5YR6/6), dark red internal slip (2.5YR4/8) and black slip on external face, hard fired.

809 Kantharos

Reg. No. 79/Y/64/071; Area Y, Sq. 2, Bucket 69

Rim diam.: 6.5; Max h.: 2

Flared rim, elongated spurred handle attached to rim. Yellowish-red core (5YR5/6), black glaze, hard fired.

9.7.2.1.13. Pseudo Kylix (No. 810)

The pseudo kylix is a stemmed cup often called a kylix. It is a shallow elegant drinking cup with plain or concaved rim, rounded wall, high foot and two horizontal handles rising to the rim level.

In Jaffa, a high base was found that probably belongs to a kylix cup. This type was defined in the Athenian Agora as a vicup subtype with a very thin stem, dated to the 1st half of the 5th century BCE (Sparkes and Talcott 1970:93, fig. 5:434–438, before 480–460 BCE).

Date range: early 5th cent. BCE

810 Kylix

Reg. No. A/71/B345; Area A, Sq. J3, Bucket 345

Base diam.: 5.8; Max h.: 3

High foot with very thin stem, flared sharply at base. Light reddish-brown core (5YR6/4), black glaze, many minute black grits, hard fired.

9.7.2.1.14. Black Body Lekythoi

This is the commonest container of oil, which was associated, in other forms, with burial customs. This type is divided to two subtypes.

A. High Body (Nos. 811–812)

Heavy, cup-like mouth with flat top that juts inward to check the flow of the oil and to enable it to collect inward. High neck, sharply carinated shoulder, curved body toward the thin disc-shaped foot. The black glazed type is dated from the late 6th century until the 2nd quarter of the 5th century BCE when it was replaced by the squatted lekythos (Sparkes and Talcott 1970:153, fig. 11:1115).

In Jaffa, examples of the disc-shaped foot was found (812) and the lower part of a body with reserved grooves decoration (811). In Israel, the type appeared in the 5th century at Tell el-Hesi (Bennett and Blakely 1989:110, figs. 67:87; 73:92–3) and Tel Keisan (Nodet 1980:126, pl. 22:17). Examples also appeared during the early 4th century at Tel Michal (Marchese 1989:147, 150, fig. 10.2:16) and Tel Mevorakh (Johnson 1978:40, pl. 29:9).

Date range: 5th–early 4th cents. BCE

811 Lekythos

Reg. No. 79/Y/68/265; Area Y, Sq. Y14, Locus L–11, Bucket 123

Max h.: 3.9

Rounded lower section of body. Two pairs of red parallel lines on external lower face. Red core (2.5YR6/6), black glaze, hard fired.

812 Lekythos

Reg. No. 79/Y/68/279; Area Y, Sq. X12, Locus L–1, Bucket 134

Base diam.: 4.9; Max h.: 2.2

Concave base with internal central depression. Red core (2.5YR6/6), black glaze, hard fired.

B. Squatted Body (No. 813)

Characterized by a fat bulbous body and a base of a very wide diameter. The type first appeared in the mid-5th century with a black and plain glaze, tall neck and echinus profile mouth (Sparkes and Talcott 1970:153, pl. 38:1120–3). During the 5th century the squatted type was very common with a panel of reserved decoration below the shoulder (Sparkes and Talcott 1970:154, pl. 38:1123–8).

In Jaffa, only an echinus rim fragment was found (813). Similar examples were recovered at Tell el-Hesi from the 5th century BCE (Bennett and Blakely 1989:110, fig. 74:94) and Beirut in the late 5th–4th centuries (Clairmont 1956:8, pl. 1:407, 409).

Date range: 5th–4th cents. BCE

813 Lekythos

Reg. No. 79/H/64/010; Area H, Sq. 1, Locus 401, Bucket 27

Rim diam.: 5; Max h.: 3

Funnel mouth with wide flattened top. Yellowish-red core (5YR5/6), black glaze, hard fired.

9.7.2.1.15. Askos (No. 814)

The askos is a kind of unguentarium or small oil juglet that was very common in the Athenian Agora (Sparkes and Talcott 1970:160, pl. 39:1192–96). The latest version, which was dated from the 4th to the early 3rd century, survived in the guttus shape that is characterized by a heavy ring foot, bag-shaped body, high thin neck, and flaring mouth. The earlier pieces had a wide base and the later ones had a higher body and a narrow base. The Jaffa examples are “two tone vessels” of black and red, which were particularly popular from the late 4th to the early 3rd centuries BCE. According to Athenian Agora parallels, it seems to be dated to a later phase, around 300–290 BCE (Rotroff 1997:172–3, fig. 71:1141).

Date range: 4th cent. BCE

814 Jug

Reg. No. A/71/B75; Area A, Bucket 75

Rim diam.: 5.6; Max h.: 4

Flaring thickened rim, high and narrow neck. Reddish-yellow core (5YR6/6), dark red glaze on upper internal face (2.5YR4/8) and external black glaze. Many minute black grits, hard fired.

9.7.2.1.16. Decorated Bowl Bases

A relatively large number of bowl bases with concentric decoration were recovered in Jaffa. Previously unknown bowl shapes were a good basis for typological and chronological research.

It is well known that in the mid-5th century BCE a new technique of decoration on black glazed bowls evolved in Athens. This new technique had a great effect on the fine pottery of the succeeding centuries in Athens and in other parts of the Mediterranean basin. This technique combined incision and stamping in the center of the bowl floor. The decoration consists of a limited pattern that was adapted by the Athenian potter partly from the old classical tradition and at the same time inspired by new interpretations. For example, the stamped palmette was a natural choice for the potter who recognized it from vase paintings and adapted the pattern. The rouletted pattern does not appear before 390–380 BCE in replacement of the ovules chain pattern as a dividing band between panels of a linked palmette or free palmette pattern. By the later part of the 4th century the repertoire was restricted to palmette and roulette patterns on echinus, outcurved bowls, and rolled-rim plates.

Almost all of the Jaffa decorated bases probably belong to the 4th century, the Early Hellenistic period, since they display the palmette pattern in its later phase of development: linked palmettes, or alternating patterns of linked palmettes, palmette cross, and roulette. The Jaffa repertoire can be divided into the following types and subtypes.

Ovule Chain with a Linked Palmette Pattern (Nos. 815–824)

The ovule chain pattern appears on the center of the floor as bordering panels of stamped linked palmettes. This pattern characterized the early stage of development and appeared on vessels dated to the mid-late 5th century in the Athenian Agora (Sparkes and Talcott 1970:29). Most of the Jaffa decorated bases are characterized by a wide floor, and even though the shape of the vessels cannot be defined with certainty they seem to belong to large bowls or plates. All of them display the popular concentric pattern of two ovules chains with bordering linked palmettes except for one example with free palmettes around the ovule chain (818). This arrangement is rather uncommon, but it appears in a few Athenian Agora vessels of the late 5th century BCE (Sparkes and Talcott 1970:111, pl. 55:614 [cup skyphos], 56:752 [handled bowl], 57:781; 58:799 [out-turned rim bowl], 59:865 [incurved rim bowl]). The pattern occurred on black glazed bowls dated to the 4th century in Sardis (Rotroff and Oliver 2003:21, pl. 5:14–15), Samaria (Crowfoot et al 1957:248–250, fig. 48:1), Shiqmona (Elgavish 1968:50, pl. LVII:129), Dor (Marchese 1995:127, figs. 4.3:2–3, 4.6:2, 5–6, 4.7:3, 6), and Apollonia (Tal 1999:131, figs. 4.27:3, 4.28:2). Other examples from Tel Michal occurred in a 3rd century context (Marchese 1989:147, 150, fig. 10.2:24).

Date range: mid-5th – 4th cents. BCE

815 Vessel

Reg. No. 79/C/71/039; Area C, Bucket 3

Base diam.: 9.8; Max h.: 2.5

High ring base. Concentric circles on underside and two concentric circle of ovolo bordering external and internal panels of linked palmettes on floor. Reddish-yellow core (5YR6/6), black glaze, hard fired.

816 Vessel

Reg. No. 79/G/64/056; Area G, Sq. 25, Bucket 63

Base diam.: 11.5; Max h.: 3.4

High ring base. Concentric band of ovolo pattern, above it linked palmettes, on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

817 Vessel

Reg. No. 79/A/56/161; Area A, Sq. D.10

Base diam.: 7.5; Max h.: 2.3

Ring base. Stamped palmettes inside ovolo pattern on floor and black circular bands on clay color background, on underside. Yellowish-red core (5YR5/6), black glaze, hard fired.

818 Vessel

Reg. No. 79/A/56/163; Area A, Sq. I9

Base diam.: 9.5; Max h.: 3

Ring base. Ovolo and palmette pattern on floor and black bands on clay color background on underside. Yellowish-red core (5YR5/6), black glaze, hard fired.

819 Vessel

Reg. No. 79/A/56/263; Area A, Sq. I7

Max h.: 7

Stamped ovolo row inside bordered by external linked by arched palmettes, on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

820 Vessel

Reg. No. 79/Y/62/012; Area Y

Base diam.: 5.5; Max h.: 3

Ring base. Concentric palmettes in center, surrounded by ovolo pattern and palmettes alternately linked by arches in the outer circle. Yellowish-red core (5YR5/6), hard fired.

821 Vessel

Reg. No. 79/C/71/044; Area C, Bucket 6

Concentric circles on the underside and two concentric ovolo patterns bordering internal concentric linked palmettes pattern, on floor. Reddish-yellow core (2.5YR6/6), black glaze, hard fired.

822 Vessel

Reg. No. 79/C/71/043; Area C, Bucket 10

Flat base. Concentric circles on the underside and two rows of concentric ovolo pattern on floor. Reddish-yellow core (2.5YR6/6), black glaze, hard fired.

823 Vessel

Reg. No. 79/D/68/041; Area D, Bucket 21

Base. Concentric ovolo pattern surrounding free palmettes on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

824 Vessel

Reg. No. 79/G/64/059; Area G, Sq. 25, Bucket 47

Sherd of wall. Concentric ovolo pattern encircled by linked palmettes on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

Roulette and Palmette Pattern

By the beginning of the 4th century the ovolues were replaced by a faster technique known as roulette decoration. The roulette became the common spiral pattern around the stamped palmettes.

A. Stitched Roulette and Palmette Pattern (Nos. 825–826)

The early roulette decoration of the early 4th century was the stitched roulette, which appeared as borders of the concentric linked or alternating palmette pattern. In the Athenian Agora, the style was dated to 375 BCE (Sparkes and Talcott 1970:110–11, pl. 55:604). The linked palmettes survived longer on plates than on bowls, probably this shape offered a larger decorative field (Rotroff 1997:37). The Jaffa examples seem to display the wide floor of rilled plates with stitched palmettes.

B. Linked Palmette Pattern (Nos. 827–830)

The early palmette pattern tended to be very uniform and with closely packed petals.

The pattern appeared in the Athenian Agora on the rilled rim bowl (Sparkes and Talcott 1970:147–8, pl. 59:1052) and on the out-turned rim bowl (Sparkes and Talcott 1970:128–9, pl. 58:805) dated to 375 BCE. A similar pattern appeared in Dor (Marchese 1995:131, fig. 4.6:5) and Tel Keisan (Nodet 1980:126, pl. 22:16), and on Late Persian and 3rd century bowls in Samaria (Crowfoot et al 1957:258, fig. 52:36–37).

C. Free Palmette Pattern (Nos. 831–839)

This pattern continued to be used in the mid-4th century BCE with more free petals palmettes, which appear unlinked in a concentric pattern. A similar pattern was found in Hellenistic Dor (Marchese 1995:131, fig. 4.6:4,8; Guz-Zilberstein 1995:294, fig. 6.5:15).

D. Cross Palmette Pattern (Nos. 840–842)

Around 300 BCE four cross palmettes substituted the linked ones on small bowls with a limited decoration space (Rotroff 1997:142–4, fig. 46:637, pls. 60, 142, 145). At Tel Michal, the pattern appeared on bowls dated to 400–350 BCE (Marchese 1989:147, 150, fig. 10.2:23). After the mid-2nd century, the rouletted decoration was used alone on incurved (773, 775, 777) and outcurved bowls (770, 767–768) from Jaffa.

Date range: 4th–2nd cents. BCE

825 Vessel

Reg. No. 79/A/55/128; Area A

Base diam.: 7; Max h.: 2

Ring base. Concentric pattern of linked by arched palmettes surrounded by rouletted pattern, on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

826 Vessel

Reg. No. 79/A/56/159; Area A, Sq. I8

Base diam.: 10; Max h.: 2.3

High ring base with grooved resting surface. Rouletted pattern encircling free palmettes on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

827 Vessel

Reg. No. 79/A/58/068; Area A, Sq. G12

Base diam.: 7.4; Max h.: 2

Ring base, nipped at underside. Stamped palmettes alternately linked by arches encircled by rouletting on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

828 Vessel

Reg. No. 79/A/70/156; Area A, Sq. J3, Bucket 145

Base diam.: 7.4; Max h.: 2

Ring base with nipped (grooved) resting surface. Six palmettes alternately linked by arches encircled by three rows of rouletting on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

829 Vessel

Reg. No. 79/A/56/022; Area A, Sq. I7

Base diam.: 8; Max h.: 1.6

Ring base with grooved (nipped) resting surface. Palmettes alternately linked by arches encircled by rouletting on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

830 Bowl/Plate

Reg. No. 79/A/70/143; Area A, Sq. K4, Bucket 191

Base diam.: 11.5; Max h.: 3.2

Ring base with grooved resting surface. Seven palmettes alternately linked by arches encircled by four rows of rouletting. Weak red core (2.5YR 6/4) and black glaze, hard fired.

831 Vessel

Reg. No. 79/A/56/160; Area A, Sq. F6

Max h.: 3.2

High ring base. Three linked palmettes on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

832 Vessel

Reg. No. 79/J/70/062; Area J, Bucket 44

Base diam.: 7.5; Max h.: 2.4

High ring base. Concentric palmette pattern encircled by two rows of rouletted pattern on floor. Reddish-yellow core (7.5YR6/6), black glaze, hard fired.

833 Vessel

Reg. No. A/71/B148; Area A, Bucket 148

Base diam.: 12; Max h.: 1.7

Wide floor. Ring base. Rouletted decoration encircling free palmettes on floor. Greek letters on underside. Yellowish-red core (5YR5/6), black glaze, hard fired.

834 Bowl/Plate

Reg. No. 79/A/55/132; Area A, Sq. H9

Base diam.: 10; Max h.: 2

Ring base. Free palmettes on floor. Weak red core (2.5YR 6/4), reddish-brown glaze (2.5YR3/1) with dark red color on center of floor (2.5YR4/6), hard fired.

835 Bowl/Plate

Reg. No. 79/A/70/207; Area A, Sq. J3, Locus 503, Bucket 130

Base diam.: 8; Max h.: 2

Ring base. Central rouletted pattern encircling free palmette pattern. Weak red core (2.5YR6/4), reddish-brown glaze (2.5YR3/1) with dark red color on center of floor (2.5YR4/6), hard fired.

836 Vessel

Reg. No. 79/A/70/157; Area A, Sq. K3, Bucket 214

Base diam.: 7.1; Max h.: 1.5

Ring base. Palmettes encircled by concentric groove. Black concentric circles on brown slipped on underside. Yellowish-red core (5YR5/6), black glaze, hard fired.

837 Vessel

Reg. No. 79/G/64/052; Area G, Locus 501, Bucket 47

Base diam.: 7.5; Max h.: 2.5

High ring base. Concentric palmettes encircled by rouletted pattern on floor. Reddish-yellow core (5YR6/6), black glaze, hard fired.

838 Vessel

Reg. No. 79/A/70/169; Area A, Sq. J3, Locus 506, Bucket 260

Wall fragment with rouletted pattern. Yellowish-red core (5YR5/6), black glaze, hard fired.

839 Vessel

Reg. No. 79/H/64/009; Area H, Sq. 1, Locus 401, Bucket 16

Sherd of floor. Concentric palmette pattern on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

840 Vessel

Reg. No. 79/A/56/157; Area A, Sq. H6

Base diam.: 7; Max h.: 2

Ring base. Four free palmettes encircled by rouletted pattern on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

841 Bowl

Reg. No. 79/A/70/206; Area A, Sq. K4, Bucket 211

Base diam.: 5.7; Max h.: 2

Ring base. Four concentric rows of free palmette pattern on floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

842 Bowl/Plate

Reg. No. 79/A/58/078; Area A

Base diam.: 7.8; Max h.: 4

Ring base. Two concentric rows of rouletted pattern, on floor. Weak red core (2.5YR 6/4), reddish-brown glaze (2.5YR3/1), hard fired.

843 Vessel

Reg. No. 79/C/71/040; Area C, Bucket 2

Base diam.: 10.5; Max h.: 1.6

Ring base. Concentric black bands on the underside. Light reddish-brown core (5YR6/4), black glaze, hard fired.

844 Vessel

Reg. No. 79/G/64/051; Area G, Sq. 29, Bucket 85

Base diam.: 7.5; Max h.: 2.5

Broad ring base. Reddish-yellow core (5YR6/6), black glaze, many small white grits, hard fired.

845 Vessel

Reg. No. 79/C/71/042; Area C, Bucket 2

Base diam.: 7; Max h.: 2

High ring base. Concentric black bands on the underside. Red core (2.5YR6/6), black glaze, hard fired.

9.7.2.2. West Slope Technique Ware

The term “west slope technique” refers to the west slope of the Acropolis in Athens, where a group of vessels was first discovered and published by Carl Watzinger.⁷⁶

The West Slope ware was imported from Attica in the 4th and 3rd centuries BCE as a result of the abandonment of the Attic Red Figure technique by the end of 4th century BCE. The ware was in ochre color with black glazing. The vegetal decoration was incised with added white paint and reserved clay color that produced a superposed red, orange or pink color. The Attic manufacture was limited in its distribution to the Greek mainland.

During the 3rd–2nd century BCE, imitations of the Attic West Slope ware were manufactured at other centers in the eastern Mediterranean, probably in Asia Minor, as NNA analysis has shown (Gunnweg 1983:35, 91, 100), Ephesos or Rhodes (Rotroff and Oliver 2003:37–8). The Eastern imitation is rarely found on the western shores of the Aegean sea but is widespread at sites such as Pergamon, Corinth, Antioch, Cyprus, Alexandria, the coast of France, and the Black Sea. At Sardis, a wide range of West Slope forms were recovered. Most of them, except four fragments with better glaze and more neatly decorations, are from the Pergamon manufacturing center.

In Israel, the West Slope ware was probably used in small quantities since it was published from only a few Hellenistic sites. The pottery that was published in Israel as Attic fabric is in fact of Eastern origin, probably from Pergamon and later on from other sites in Asia Minor. Keeping in mind the fact that in the Athenian Agora none of the following forms was found, it will be reasonable to conclude that the Attic fabric

⁷⁶ Watzinger 1901:50–102.

was rare in the eastern Mediterranean in the same manner as the Eastern fabric never penetrated the Greek mainland.

In Jaffa, the two distinctive fabrics were identified.

9.7.2.2.1. Pseudo Attic Fabric

The first fabric is close to the Attic prototype. The black glaze is lustrous and the vegetable white decoration is of a high quality.

9.7.2.2.1.1. Cup with Exterior Decoration (No. 846)

Strongly incurved rim with double grooves below it, rounded wall. Decorated band of simplified leaves, ivy leaves on either side or olive garland, usually in white, placed below rim. The type was dated according to the Sardis forms from the mid-3rd to the mid-2nd century BCE (Rotroff and Oliver 2003:39–40, nos. 117–129, 202).

In Jaffa, one fragment was found with a wide band of ivy leaves below the rim. That type was known in the eastern Mediterranean and appeared in Antioch (Waagé 1948:28, 47, fig. 8:6–7) Nicosia (Berlin and Pilacinski 2003:217–219, fig. 5:73–78), Pergamon, Ephesos, Rhodes, and was very popular in Sardis (Rotroff and Oliver 2003:39, pl.30:202). In Israel it was found at Dor (Rosenthal-Heginbottom 1995:222, fig. 5.8:2–5; 238–9 fig. 44:14–15) and Samaria (Crowfoot et al 1957:239, fig. 44:14–15), from the 4th–3rd centuries BCE.

Date range: 4th–3rd cents. BCE

846 Cup

Reg. No. 79/C/61/392; Area C, Sq. CC102, Locus 415, Bucket 178

Rim diam.: 12; Max h.: 3

Moulded rim, rounded wall. Clay color painted pattern of ivy tendrils on upper external face, black glaze. Pink core (7.5YR7/4), medium fired.

9.7.2.2.1.2. Krater/Pitcher (No. 847)

The shape of the krater resembles the traditional Greek column krater with ledged rim and wide decorated neck.

In Jaffa, a fragment was found with a thick flaring ledged rim and wide low neck. The fabric is of a high quality with a black lustrous glaze even though the following parallels are considered of Eastern manufacture. At Dor, two almost complete kraters were found with olive wreath decorations on the neck and others with palmette and myrtle motifs (Rosenthal-Heginbottom 1995:229, fig. 5.11:7–11). They were considered belonging to a krater with a ledged rim of Eastern manufacture origin. The same type of krater was found in Samaria and was defined on the basis of its fabric as an imitation of the west slope technique dated to the late 3rd century BCE (Crowfoot et al 1957:239, fig. 45:1–4).

The neck decoration with a garland of ivy tendrils seems to be in the same style of the Sardis pitcher (Rotroff and Oliver 2003:55 pl. 26:176).

Date range: 3rd–2nd cents. BCE

847 Pitcher/Krater

Reg. No. 79/A/71/228; Area A

Max h.: 2

Thick outcurved rim. White painted and reserved clay color pattern of ivy leaves on stems decoration on external upper face, black glaze. Yellowish-red core (5YR5/6), hard fired.

9.7.2.2.1.3. Skyphoi (Nos. 848–850)

Plain open cup with pointed rim, straight walls and probably two horizontal handles. The area below the rim is decorated and set off by a wheel-run groove, the lower body is often ribbed. The shape seems to have been produced throughout the 3rd–2nd century BCE.

In Jaffa, rim fragments were found that are very difficult to identify with certainty as skyphoi. However, the straight rim with the ivy tendril decoration is similar to the samples of skyphoi that were recovered in Sardis and considered an Eastern production from Pergamon, Ephesos or Rhodes (Rotroff and Oliver 2003:39, pl. 19:112–15). The ivy tendril pattern was in common use on west slope vessels from 330 BCE onward.

At Dor, relatively many fragments of skyphos rims were recovered, decorated with the common ivy tendril pattern below the rim (Rosenthal-Heginbottom 1995:222, fig. 5.8:1–5). All the skyphoi and the kanthroi in Dor were considered Attic imports.

Date range: 3rd–2nd cents. BCE

848 Skyphos

Reg. No. 79/Y/64/108; Area Y, Sq. 3, Locus 605, Bucket 35

Rim diam.: 9; Max h.: 2.5

Plain rim. Clay color painted pattern of two ivy leaves and flower pattern on external upper face. Dark gray core (5YR4/1), black glaze, hard fired.

849 Skyphos

Reg. No. 79/Y/68/276; Area Y, Sq. Y13, Locus L–15, Bucket 79

Plain rim, straight wall. Clay color and white painted pattern of a branch with flower and two ivy leaves on external face. Reddish-brown core (5YR5/4), black glaze, hard fired.

850 Skyphos

Reg. No. 79/Y/68/275; Area Y, Sq. X12, Locus L–1, Bucket 111

Plain rim with pointed lip. Clay color painted pattern of a branch with a design of two flowers and two ivy leaves on external floor. Yellowish-red core (5YR5/6), black glaze, hard fired.

9.7.2.2.1.4. Kantharoi (No. 851–852)

The S-shaped kantharos with convex-concave profile and strap handles was considered the standard drinking vessel of the west slope technique. It was well documented at Eastern sites such as Pergamon, Ephesos and Sardis during the 3rd–2nd century BCE. The shape continued to flourish in the Terra Sigillata repertoire.

The Jaffa example displays a rim and neck with unclear decoration on neck. The lower wall was fluted in the well known west slope manner. The convex-concave profile seems similar to the Sardis example, which was dated to the 2nd half of the 3rd century BCE (Rotroff and Oliver 2003:45–6, pl. 18:108). Many examples were recovered in Samaria with a garland decoration on neck, all of them dated to the 1st half of the 3rd century and considered Attic imports (Crowfoot et al 1957: 237, fig. 44.6).

At Dor, several kantharos fragments were decorated at the neck with olive wreaths, which were dated from the late 4th to the mid-3rd century BCE (Rosenthal-Heginbottom 1995:222, fig. 5.8:6–7). At Ashdod, a rim fragment with necklace and pendant decoration was dated to 100 BCE (Dothan 1971:51, fig. 14:9).

Date range: Hellenistic

851 Kantharos

Reg. No. 79/Y/64/105; Area Y, Sq. 3, Locus 605, Bucket 58

Rim diam.: 10; Max h.: 7

Flared rim, wide concaved neck, rounded shoulder, handle from the neck to the body. Relief decoration of vertical lines below the shoulder. White and clay colored decoration, on the shoulder. Yellowish-red core (5YR5/6), black glaze, hard fired.

852 Juglet

Reg. No. 79/A/70/112; Area A, Sq. J4, Bucket 327

Slightly flaring plain rim, rounded body, loop handle from rim. Pink ware (7.5YR7/4) and dark gray core (7.5YR4/1), black glaze, hard fired.

9.7.2.2.1.5. Reversible Lid (No. 853)

This is a covering for a bowl or lekane but can also be considered a bowl for mixing cosmetics. It is difficult to reconstruct the shape of the Jaffa fragment (no. 853), although it is similar in shape and decoration to the Sardis examples, which were dated to the 1st century BCE (Rotroff and Oliver 2003:45, pl. 29:195–6).

Date range: 2nd–1st cents. BCE

853 Reversible Lid

Reg. No. 79/D/63/039; Area D, Bucket 4

Wall fragment. Painted wavy stem in white with garland of leaves pattern in reserved clay color on external face. Yellowish-red core (5YR5/6), black glaze, hard fired.

9.7.2.2.2. Eastern Mediterranean Fabric

The characteristic ware changed from dark to reddish-brown and the slips changed from matte dark brown to reddish-brown. It is hard to define one group, since various fabrics were used. The manufacture of these fabrics was probably concentrated in a few production centers and not a single one.

9.7.2.2.2.1. Heavy Rolled Grooved Rim (Nos. 854–857)

Heavy rolled and grooved rim, thick sloping wall and ring base. The fabric is rather coarse with matte dark sepia glaze on the interior and upper exterior face.

This is the most popular shape of West Slope vessels in the Eastern Mediterranean Fabric that has appeared at sites in Israel so far. The type is probably a copy of the Attic black glazed rolled rim plates.

Two subtypes were distinguished in Dor, on the basis of the painted decorations (Rosenthal-Heginbottom 1995:225): the first one with the ivy tendril and leaves decoration and the second with the myrtle or olive wreath.

In Jaffa, this type of west slope form was very common. Two large plates appear with ivy tendrils in white decoration (854–855). At Dor, it was the most common motif (Rosenthal-Heginbottom 1995:225–7, fig. 5.9:11–12). More examples appeared in the late 1st century BCE in Ashdod (Dothan 1971:45–6, fig. 8:20), Beth-Shean (Johnson 2006:527, fig. 15.1:20–21; 1.2:22) and at the 2nd century BCE level in Antioch (Waagé 1948:11, and pl. 1 :H7–8) and Paphos (Hayes 1991:120, and fig. II:8). A third plate found in Jaffa with interior black glaze was probably decorated also (857). One plate in Jaffa was decorated with the myrtle motif. This pattern appeared in Dor (Rosenthal-Heginbottom 1995:225–7, fig. 5.10:6–10) (856) as well as Beth-Shean (Johnson 2006:527, fig. 15.2:23). At Samaria, those decorated plate are very familiar and were dated to the late 3rd–2nd century BCE (Crowfoot et al 1957:243–4, fig. 47:1–5). Those plates continued to be in use until mid-2nd century BCE according their dating in Beth-Zur to 175–165 BCE (Lapp 1961:220, Type 353:515).

In the Athenian Agora, a few examples of this plate were found, one of them with a rolled rim dated to the early 3rd century BCE (Rotroff 1997:153, 326, and fig. 56:829).

It is rather surprising to find out that those very popular plates are totally missing from the Sardis repertoire.

Date range: 3rd–1st cents. BCE

854 Plate

Reg. No. 79/A/58/103; Area A

Rim diam.: 41; Max h.: 4.5

Heavy rolled rim with two internal grooves, sloping wall. White painted pattern of two ivy tendrils on black background. Dark gray core (7.5YR4/1), black glaze, hard fired.

855 Plate

Reg. No. 79/A/70/161; Area A, Sqs. J3–J4, Bucket 138

Rim diam.: 33; Max h.: 4

Heavy rolled rim with two internal grooves, sloping wall. White painted pattern of two ivy tendrils on black background. Brown core (7.5YR5/3), black glaze, many minute black grits, hard fired.

856 Plate

Reg. No. 79/A/70/166; Area A, Sq. K3, Bucket 136

Rim diam.: 22; Max h.: 3.5

Heavy rolled rim with two internal grooves, sloping wall. White painted pattern of wreath leaves on black background. Brown core (7.5YR5/3), black glaze, many minute black grits, hard fired.

857 Plate

Reg. No. 79/A/56/173; Area A, Sq. F6

Rim diam.: 36; Max h.: 4.5

Heavy rolled rim with two internal grooves, sloping wall. Concentric white band on floor and red-black paint on rim. Light brown ware (7.5YR6/3), hard fired.

9.7.2.2.2. Flared Rim (No. 858)

Large plate, flaring rim with overhanging lip decorated on external rim and upper part. In Jaffa, one example was found with incised double grooves and a wavy line below the lip. At Dor, those plates also appeared with rolled rims and were decorated with vegetable white paint. According to parallels, they were dated to the 3rd–2nd century BCE (Rosenthal-Heginbottom 1995:277–8, fig. 5.10:13–14, 5.11:1).

Date range: 3rd–2nd cents. BCE

858 Plate

Reg. No. 79/D/63/058; Area D, Bucket 37

Rim diam.: 35.6; Max h.: 1.4

Flaring rim hanging down. Incised graffiti on internal face. Brown core (7.5YR4/3), black slip with metallic appearance, hard fired.

9.7.2.2.3. Triangular Grooved Rim (No. 859)

In Jaffa, one plate was found with the familiar west slope fabric. The rim has a triangular section and is grooved below. The plate is not decorated. At Sardis, an uncertain parallel appears dated to the 1st half of the 3rd century BCE (Rotroff and Oliver 2003:57, pl. 28:191).

Date range: Hellenistic

859 Bowl

Reg. No. A/70/B299; Area A, Sq. L3

Rim diam.: 19.5; Max h.: 2

Triangular section rim, grooved on top, sloping wall. Red core (2.5YR5/6), black glaze, many small gold mica, hard fired.

9.7.2.2.4. Table Amphorae (Nos. 860–863)

The traditional west slope amphora was found mainly as small fragments of bases, decorated shoulders or fluted body sherds. The amphora displays a high neck with projecting rim, fluted body and molded high foot. The common neck was decorated with spearhead necklaces, with white ribbons, incised links and pendants in white or added red. The handle was usually twisted (Crowfoot et al 1957:238, fig. 44:1).

This type of amphora was developed in Athens in the early 3rd century and survived until the 1st century BCE. The Eastern imitation was manufactured in Pergamon during the early 2nd century BCE according to

parallels found in Paphos, Tarsus and the Aegean Island of Tinos. At Sardis, the type was dated to the mid-2nd century BCE (Rotroff 1997:43).

Only small fragments of amphoras were found at sites in Israel. At Samaria, an amphora of Attic importation was found dated to the late 3rd century BCE (Crowfoot et al 1957:238, fig. 44:1).

In Jaffa, only small fragments were found with the identical amphora features.

A high foot with a fluted body fragment (863) and a fragment of a fluted body (862) is similar to the Samaria bases that were identified by mistake as kraters and were dated to the 3rd–2nd century BCE (Crowfoot et al 1957:239, fig. 45:10–17). At Sardis, the same base was considered an amphora base dated to the 2nd half of the 2nd century BCE (Rotroff and Oliver 2003:42–3, pl. 24:171). At Dor, similar pieces of bases and decorated body fragments were identified as of Eastern manufacture origins (Rosenthal-Heginbottom 1995:230, fig. 5.12:3–5).

Two shoulder fragments with decorated necklaces (860–861) were identified in Sardis as belonging to the 2nd half of the 2nd century BCE amphoras (Rotroff and Oliver 2003:52–3, pl. 23:162).

A similar pattern appeared on a juglet in Dor (Rosenthal-Heginbottom 1995:223, fig. 5.9:3–4).

Date range: Hellenistic

860 Amphora

Reg. No. 79/C/65/560; Area C, Sq. CC102, Locus 449, Bucket 1011

Max h.: 4.5

Remains of handle? White painted pattern of crossing spiral with dots on center of each circle on upperpart of shoulder. Below the shoulder on the lower panel there are sharp vertical fluted incisions. Light reddish-brown core (5YR6/4), black glaze, hard fired.

861 Amphora

Reg. No. 79/G/64/057; Area G, Sq. 26, Bucket 23

Max h.: 5.5

Sherd of neck. Three encircling incisions creating four decorated panels (from up downward): dots on clay color round lower part of neck, wreath of olive leaves pattern encircling the shoulders, vertical fluted incision. Strong brown ware (7.5YR5/7) and dark brown slip (7.5YR3/2), hard fired.

862 Amphora

Reg. No. 79/J/70/067; Area J, Bucket 28

Wall fragment. Fluted incisions on external face. Red ware (2.5YR5/6), black glaze, hard fired.

863 Amphora

Reg. No. 79/J/70/064; Area J, Bucket 34

Max h.: 4.5

Trumpet base. Fluted vertical incision on external lower part of body. Pink core (7.5YR7/4), black glaze, hard fired.

9.7.2.2.2.5. Kalathos (No. 864)

In Jaffa, an example was found with a flat projecting rim and vertical heavy wall. Ivy garland decoration appears below the rim. A similar kalathos rim dated to the 2nd half of the 2nd century BCE decorated with an ivy garland in clay color was found in Sardis (Rotroff and Oliver 2003:44, 56, pl. 27:183). At Dor, a similar rim was identified as a krater (Rosenthal-Heginbottom 1995:229, fig. 5.11:8).

Date range: Hellenistic

864 Kalathos

Reg. No. 79/D/63/036; Area D, Bucket 21

Rim diam.: 30; Max h.: 3.5

Projecting rim with triangular section, flattened on top, nearly vertical wall. Painted ivy-leaf pattern linked by wavy lines in white color on black background, below rim. Brown core (7.5YR5/3), black glaze, hard fired.

9.7.2.2.2.6. Miscellaneous (Nos. 865–867)

865 Krater

Reg. No. 79/Y/68/284; Area Y, Sq. X12, Locus L–1, Bucket 117

Rim diam.: 35.8; Max h.: 6

Thickened rounded rim, groove on inner face under the rim with external paralleled lug. Red core (2.5YR5/6), black glaze, hard fired.

866 Vessel

Reg. No. 79/A/55/129; Area A, Sq. H8, Locus 3B

Wall fragment. White painted pattern of lines (thick brush dabs) on black background, on external face, reddish-yellow ware (5YR6/6), black glaze, hard fired.

867 Vessel

Reg. No. 79/Y/68/329; Area Y, Sq. Z15, Locus L–19, Bucket 104

Wall fragment. White painted ivy leaf and wavy lines on dark brown background, on external face. light brown core (7.5YR6/4), hard fired.

9.7.2.3. Moldmade Relief Bowls

The traditional “Megarian Bowls” with moldmade hemispherical body without handles or base, decorated all over its exterior face with relief designs. The plain outcurved rim was added separately and made by wheel. The ware is fired gray with a blackish-brown slip. The fabric has a micaceous appearance.

The decoration repertoire was very distinctive and fairly standard. It can be divided into four stylistic categories: Imbricate, floral, figured, and linear schemes. Those decoration schemes were identified as metal prototypes, and several examples of hemispherical silver, bronze and gold bowls with a similar relief decoration were recovered (Rotroff and Oliver 2003:92).

The earliest prototypes came from the Athenian Agora and were dated to the mid-3rd century. It was characterized by hard fired buff ware and lustrous chocolate color glaze. It was suggested that they were made as copies of Ptolemaic silver ware imported to Athens for the first Athenian Ptolemaic in 224 BCE (Rotroff and Oliver 2003:92).

Most of the relief bowls were of Ionian origin. According to the Delos excavations their workshop was located around Ephesos and it was suggested that they were produced in the Greek coastal settlement for a short period of time, to be precise the years 166–69 BCE (Laumonier 1977:7; Hayes 1997:40).

Eastern Mediterranean Workshops

In the eastern Mediterranean, Attic imports were rather rare. However, in Israel and its vicinity, duller and coarser relief bowls were recovered at many Hellenistic sites. That subtype was considered a later Eastern imitation defined by its pinkish buff ware with red slip on lower part shading into blackish-brown above. Antioch on the Orontes was suggested as their place of manufacture (Waagé 1948:14–15, 29–31; Crowfoot et al 1957:272). The close resemblance to Eastern sigillata recently led to the conclusion that they were local imitations, probably manufactured in Asia Minor, the Aegean, Cyprus and Western Syria (Hayes 1991:13–14). In the Early Roman period the sigillata ware replaced them and was manufactured at nearby centers.

The Jaffa examples are part of the common repertoire of relief bowls in Israel and belong to the eastern Mediterranean fabric dated from the 2nd to the 1st century BCE (Crowfoot et al 1957:272–280).⁷⁷ The bowl fabrics are varied in color from light buff to gray ware. However, the dull slip quality and morphological shape point to eastern Mediterranean sources. Most of the bowls are rather small with vertical to outcurved rims. The ware is pink or pale yellow with red to dark gray slip. In the Antioch repertoire, the relief bowls were quite similar in shape, decoration and fabric and were probably manufactured in same production center as assemblages in Israel (Waagé 1948:29–39, pl. iv:HM1–2, HM6–7).

⁷⁷ A large assemblage was recovered at Samaria.

The Jaffa ware, glaze and decoration resembled the Antioch and Samaria repertoire and probably were manufactured in the same center of production in the Antioch vicinity (Crowfoot et al 1957:272–3; Waagé 1948:29–30) or Southwest Asia Minor (Slane 1997:412). The decorations are mostly vegetal designs and can be divided into two chronological stage of development according to Lapp (1961: type 158).

9.7.2.3.1. Early Type with Border Zones (Nos. 868–880)

The early type, dated to the 2nd–1st century BCE, was decorated with three external panels – the border zone below the rim, the body zone, and the base medallion (Lapp 1961, Type 158a–g; Crowfoot 1957, fig.61).

The common border decoration is the egg-and-dart pattern (868–873) and the rosette pattern (874–875). It is usually accompanied by an imbricate pattern of leaves 872, 874) (Waagé 1948: 29–31, pl. IV:HM6) or a pinecone pattern (876). Another linear pattern that appears at the body zone is pendant drops (868–869). The floral scheme on Jaffa bowls is wreaths of olive leaves (870). Two fragments with figural motifs appeared in Jaffa, the first with running lion (871) and the second with an uncertainly defined peacock head (880).

Date range: 2nd–1st cents. BCE

868 Moldmade relief bowl

Reg. No. 79/X/60/006; Sounding X, Bucket 7

Rim diam.: 16; Max h.: 5.5

Plain and slightly flaring rim, rounded molded wall. Pendant drops pattern (or female dancers) and bird pattern below. Pink ware (7.5YR8/3), very dark gray (7.5YR3/1) and dusky red slip (2.5YR4/3), hard fired.

869 Moldmade relief bowl

Reg. No. 79/A/56/223; Area A, Sq. I7

Rim diam.: 15.6; Max h.: 4.4

Flared rim, rounded molded walls, ovolo row pattern between two pairs of parallel lines and a row of pendant drops below it. Pinkish-white core (7.5YR8/2), dusky red (2.5YR4/2) and dark red (2.5YR4/6) slip, hard fired.

870 Moldmade relief bowl

Reg. No. 79/A/72/133; Area A, Sq. I10, Bucket 285

Rim diam.: 15; Max h.: 5.8

Flared rim, molded rounded wall. One row of egg-and-dart border below a wreath of olive leaves. Red core (2.5YR6/6), reddish-black (2.5YR2.5/1) and dark red slip (2.5YR4/8), hard fired.

871 Moldmade relief bowl

Reg. No. 79/A/70/163; Area A, Sq. K4, Locus 505, Bucket 168

Rim diam.: 14; Max h.: 7.5

Flared rim, molded rounded wall. Ovolo pattern and running lion figure below. Reddish-yellow core (5YR6/6) dark reddish-gray (2.5YR4/1) and dark red (2.5YR4/6) slip, hard fired.

872 Moldmade relief bowl

Reg. No. 79/J/70/066; Area J, Bucket 19

Rim diam.: 12.7; Max h.: 4.5

Flared rim, rounded molded wall. One row of egg-and-dart border above three rows of imbricate lotus petals pattern. Reddish-yellow core (7.5YR6/6), very dark gray (7.5YR3/1) slip, a few small white grits, hard fired.

873 Moldmade relief bowl

Reg. No. 79/A/56/166; Area A, Sq. I8

Max h.: 3.4

Flared rim. Reddish-yellow core (7.5YR6/6), very dark gray (7.5YR3/1) slip, a few small white grits, hard fired.

874 Moldmade relief bowl

Reg. No. 79/C/65/561; Area C, Sq. CC102, Locus 449, Bucket 1012

Rim diam.: 13.5; Max h.: 4.5

Pointed rim, rounded molded wall. Row of four rosettes pattern below rim above two rows of imbricate chevron-shaped leaves pattern. Gray ware (5Y6/1–5/1), black slip, a few minute white grits, medium fired.

875 Moldmade relief bowl

Reg. No. 79/H/64/027; Area H, Sq. 1, Locus 400, Bucket 8

Wall fragment. raised pinecone pattern. Reddish-yellow core (7.5YR7/6), weak red slip (10R4/4), hard fired.

876 Moldmade relief bowl

Reg. No. 79/A/56/264; Area A, Sq. I8

Rim diam.: 12; Max h.: 3.8

Pointed rim, round molded wall. One row of rosettes alternating with a cross and dot pattern, below rim. Yellowish-red core (5YR5/6) and reddish-brown core (5YR4/3), hard fired.

877 Moldmade relief bowl

Reg. No. 79/G/64/064; Area G, Sq. 29, Bucket 77

Wall fragment with imbricate pattern. Pink ware (7.5YR8/4), dark brown slip (7.5YR3/3), hard fired.

878 Moldmade relief bowl

Reg. No. 79/A/55/116; Area A

Wall fragment. Egg-and-dart pattern below rim and acron

scroll patterns with a row of dots (uncertain pattern) below. Reddish-brown core (5YR4/3), dark reddish-gray slip (5YR4/2), hard fired.

879 Moldmade relief bowl

Reg. No. 79/A/55/114; Area A

Wall fragment with ovolo pattern. Pink core (5YR7/4) reddish-brown slip (5YR4/3–4/4), hard fired.

880 Moldmade relief bowl

Reg. No. 79/Y/68/323; Area Y, Sq. Y14, Locus L–13, Bucket 63

Wall fragment with bird head and pointed sword(?) pattern. Very pale brown core (10YR7/3), dark gray slip (10YR4/1), hard fired.

9.7.2.3.2. Late Type with Widely Spaced Motifs (Nos. 881–882)

The late type characterized the latest stage of development of the relief bowls, dated to the late 1st century BCE. The decorations were less dense, and the motifs tend to be widely spaced over the surface (Lapp 1961, Type 158h).

A single example is a body fragment with a long petal palmette decoration (882). Most common, for example, was the concentric palmette around a base medallion (881) (Waagé 1948:30).

At Dor, only 3 out of 64 relief bowls fragments were identified as of Attic origin (Rosenthal-Heginbottom 1995:209, fig. 5.3:1–3). The same situation characterized all the eastern Mediterranean sites including Israel. The local inhabitants preferred the local manufactured wares, which were cheaper than the original Attic ware and easy to reach by coastal trade. At Tel Anafa, relief bowl fragments are widely spread,⁷⁸ with 27% of them imported from the Eastern Aegean and Asia Minor, and none of them of Attic origin or from other mainland sites in Greece (Slane 1997:412). The Eastern type appeared in other 2nd–1st century BCE contexts throughout Israel. In the northern region, they appeared in Yoqne‘am (Avisar 1996:48–50, fig. x.1:30), Akko (Dothan 1976:31, fig.31), Beth-Shean (Johnson 2005:528, nos. 25–26), and Tel Keisan (Breind 1980, pl 14:29–33). In southern Israel, this type was recovered in Gezer (Gitin 1990:251, fig. 44:15–16), Maresha (Levine 2003:80, fig. 6.2:20–26), and Samaria (Crowfoot et al 1957:275–280, fig. 61–64). They were also found in Coastal Plain sites such as Dor (Marchese 1995:211, fig. 5.3–5.4), Caesarea (Oleson 1994:141, fig. 51:RG186), Mevorakh (Rosenthal 1978:23, fig. 3:7), Apollonia (Fischer and Tal 1999:229, fig. 5.7:3–4), Ashdod (Dothan 1971:58, fig. 19; 175, fig. 99:4–5), and Shiqmona (Elgavish 1974:58–9, pl. XXXV–XXXVI).

Date range: 2nd–1st cents. BCE

⁷⁸ Cornall 1997:407. 1120 fragments of relief bowls were recovered in Tel Anafa.

881 Moldmade relief bowl

Reg. No. A/72/B33.4; Area A, Sq. L4 K4, Bucket 33

Rounded base with concentric rosette pattern surrounded by egg-and-dart pattern. Reddish-yellow core (7.5YR7/6), internal dusky red slip (2.5YR3/3) and external dark red slip (2.5YR4/6), medium fired.

882 Moldmade relief bowl

Reg. No. 79/X/60/007; Sounding X, Bucket 34

Wall fragment with palm leaf pattern. Pink core (7.5YR7/4), yellowish-red slip (5YR5/6), hard fired.

9.7.2.4. Pergamon Sigillata Ware (Nos. 883–884)

Pergamon ware is marked by a class of drinking vessels hard fired with light red fabric, a black glossy slip on external face, a sigillata red slip on the interior, and a round base (implying firing in stacks). The technique resembled the Terra Sigillata ware and probably can be considered the early mid-2nd century stage of its development.⁷⁹ The vessels were usually undecorated or with an appliqué decoration. Their production center was identified as Pergamon-Kestel (Hayes 1997:41). At a later stage of development in the Early Roman period, a new style appears with a painted white decoration that was called “West Slope Imitation.”

In Israel, it was quite rare. At Tel Anafa, 46 pieces of cups, chalice and skyphoi were recovered dated from 98 BCE to the early 1st century CE.

In Jaffa, one fragment of a pedestal foot was found covered with the common Pergamon bichrome slip (883). That molded foot can be identified as a chalice base with a globular grooved body similar to the Tel Anafa Pergamon ware cup dated to 98 BCE (Slane 1997:356–7, pl. 30:495). In Antioch, similar Pergamon red ware bases were found, which were dated to 170 BCE (Waagé 1948, pl. viii:3–9). However, in Samaria, a similar footed base was identified as Eastern Sigillata B from Samos or Ephesos dated from the 1st century BCE to the 1st century CE (Crowfoot et al 1957:343, fig. 83:7).

Another fragment from Jaffa with an appliqué decoration resembles in style to the Pergamon ware and can be paralleled with a similar fragment in Sardis dated to the 2nd–1st century BCE (Rotroff and Oliver 2003:152–9, and pl. 117:673–674) (884). However, the Jaffa ware is gray and the slip has a totally lustrous black color that can therefore be considered a South Italian imitation of the Pergamon shape and appliqué decoration. The same black glaze with an appliqué decorated fragment appears at Benghazi although it had red slip (Kenrick 1985:83, and fig. 15:115.1–115.2).

Date range: 2nd–1st cents. BCE

883 Chalice

Reg. No. 79/A/73/131; Area A, Locus 1001, Bucket 47

Base diam.: 4.3; Max h.: 4

Foot base, widening downward. Red core (2.5YR5/8), internal reddish-black slip (2.5YR2.5/1) and external dark red slip (2.5YR4/8), a few minute white grits, hard fired.

884 Vessel

Reg. No. 79/C/65/562; Area C, Sq. CC102, Locus 449, Bucket 1012

Body fragment with appliqué decoration of two human figures. Dark reddish-gray ware (2.5Y5/1), external black slip, hard fired.

9.7.2.5. Italian Campana A Ware (Nos. 885–887)

The fabric is reddish-brown with metallic gray-black slip, usually considered a product of the Bay of Naples (for a short overview, see Kenrick 1985:9–28). The penetration of various Campana wares around the eastern Mediterranean has recently become clearer following Kenrick’s research in Benghazi, Morel’s in Delos, and Hayes in Paphos (Hayes 1991:7). The Campana ware arrived at its distribution peak around the

⁷⁹ Hayes 1997:41. The waxy gloss appearance of the red slip is slightly different from the Early Roman Sigillata, which was probably produced in other workshops.

mid-2nd century BCE in Delos and Paphos. By the end of the 2nd century the flow was replaced by the Eastern Sigillata.

Despite the distance from its sources, Campana A ware was quite common in Palestine. They appear in small quantities in a wide distribution pattern. At Maresha, many examples were found, four of them were published and many others will be published soon (Levine 2003:79, fig. 6.1:16–19).

In Jaffa, one sherd was found that can be considered similar in fabric and technique to Campana A. That piece represents the most common Campana A shape in Israel (Morel Type 1443) and was dated to the 1st half of the 2nd century BCE (885) (Morel 1986:464, fig. 2:13). At Tel Anafa, 33 pieces appear, few of which can be dated to the Hellenistic 1B level (198–125 BCE), even though they flourished in the Early Roman period. At Tel Anafa, Morel's Type 1443 was dated to 125 BCE (Slane 1997:347, pl. 28:FW 457). At Maresha, the same bowl shape appears at the Hellenistic level (Levine 2003:79, fig.6.1:17).

Another bowl can be identified as Campana A according to its fabric and glaze but has no certain parallels (886). The closest parallel appears in Delos, where it was classified as Type 1300, dated before the mid-2nd century BCE (Morel 1986:464, fig. 1:8). At Maresha and Tel Anafa, small rim sherds were found that resembled the Jaffa example (Slane 1997:348, pl. 28:456; Levine 2003:79, fig. 6.1:16). At the Athenian Agora a similar example was considered being from a Rome or Etrurian workshop and was dated to 275–210 BCE (Rotroff 1997:407 fig. 98:1643).

Date range: Early Hellenistic

885 Bowl

Reg. No. 79/A/55/108; Area A, Sq. H9, Locus D1

Rim diam.: 23.5; Max h.: 1.4

Projecting rim with raised lip. Reddish-brown core (5YR5/4), black slip with metallic appearance. Hard fired.

886 Bowl

Reg. No. C/65/B1041.3; Area C, Sq. CC103, Locus 451, Bucket 1041

Rim diam.: 22; Max h.: 1.5

Wide arched rim. Reddish-brown core (5YR5/4), black slip with metallic appearance. Hard fired.

887 Jug

Reg. No. 79/A/70/229; Area A, Sq. J3, Locus 506, Bucket 259

Base diam.: 7.6; Max h.: 1.5

Grooved inside walls, flat base. Reddish-yellow ware (5YR6/6), black slip with metallic shine, hard fired.

9.7.2.6. Asia Minor Gray Ware

Gray ware pottery was intentionally fired in a reducing atmosphere and consequently having gray fabric and black or gray glaze. It had a long tradition in Lydia. It is not a ware at all, since any iron rich clay could be fired either red or gray at will.

Earlier gray ceramics usually have a burnished surface, produced by polishing that may or may not have been slipped beforehand. Gray pottery continued to be made throughout the Hellenistic and into the Early Roman period at many centers in the eastern and western Mediterranean (Rotroff and Oliver 2003:31–2).

Other sites along the west coast of Asia Minor furnished comparative material such as Kofina Ridge, Chios (3rd century BCE), Troy (before 260 until the later 2nd century BCE), and many other sites in Asia Minor. The tradition flourished in other parts of the eastern Mediterranean such as Antioch, Corinth, and Sparta.

The gray ware vessels in Jaffa are not homogeneous in fabric, style, and technique. They were probably of various origins and appear in two forms.

9.7.2.6.1. Echinus Bowls (Nos. 888–889)

Incurved rim, rounded wall and ring base. This is a well known shape in the Greek traditional repertoire and can be considered a close imitation of the late 4th to early 3rd century Greek models of all sizes, which were popular in gray and other ware types in various periods.

In Jaffa, examples appear with a very hard lustrous black glaze that has a metallic shine (888–889). Similar bowls of high quality appear in Sardis dated from the 4th to the early 3rd century BCE (Rotroff and Oliver 2003:32–3, pl.15:73–78).

Date range: late 4th – 3rd cents. BCE

888 Bowl

Reg. No. 79/A/74/070; Area A, Bucket 67

Rim diam.: 12.5; Base diam.: 7; Max h.: 4.5

Incurved rim, rounded walls, high ring base. Dark gray core (5YR5/1), knife pared ware with dark gray-ish-brown slip (10YR4/2) with metallic shine. Many minute white grits, hard fired.

889 Bowl

Reg. No. A/70/B254.1; Area A, Sq. L4, Bucket 254

Rim diam.: 5; Max h.: 3.5

Incurved rim, rounded walls with light ribs. Dark gray ware (10YR4/1) and gray core (10YR5/1), black slip with metallic shine, hard fired.

9.7.2.6.2. Infolded Rim Plates (Nos. 890–891)

Infolded rim, sloping walls and ring base.

The rim shape brings to mind the late development of the traditional fish plate of the color coated type. The shape is similar but the fabric is different. The soapy glaze of one example in Jaffa seems like the imitation of the Ionian plate fabric (891). The second example (892) can be paralleled to the “other Gray ware” bowl that was recovered in the Athenian Agora (Rotroff 1997:235, pl. 97:1606).

Date range: Hellenistic

890 Plate

Reg. No. 79/C/65/584; Area C, Sq. CC102 Buckets 980, 1002

Rim diam.: 14; Base diam.: 6; Max h.: 2.5

Incurved thickened rim, shallow sloping wall, wide ring base. Reddish-brown core (2.5Y3/1), black slip, many small black grits, hard fired.

891 Plate

Reg. No. A/70/B56.2; Area A, Sq. L1 Bucket 56

Rim diam.: 18; Max h.: 2.5

Incurved thickened rim, shallow sloping wall. Dark reddish-gray ware (2.5YR4/1–5/1), many minute quartz, hard fired.

9.7.2.6.3. Flared Rim Plate (No. 892)

Plain outturned rim and flared wall, slight carination at lower part of wall. No parallels were found.

893 Plate

Reg. No. A/70/B13.2; Area A, Sq. J3, Bucket 13

Rim diam.: 19; Max h.: 3

Flared rim and wall. Very pale brown ware (10YR7/3), black slip, hard fired.

9.8. Early Roman Imported Ware

9.8.1. Italian Thin Walled Ware

This is a group of drinking vessels, beakers and cups, that are distinguished primarily by the thinness of their walls (0.01–0.02 cm). The vessels were usually decorated with roulette, relief (*en barbotine*) and red to dark brown slip, probably reflecting a desire to imitate metal vases (Stojanovic 1992:35).

The ware originated in the western part of the Roman Empire during the 2nd quarter of the 2nd century BCE and during the Early Roman period. By the end of the 1st century BCE the ware was copied in the eastern Mediterranean workshops and were also imitated in the Nabatean tradition (egg-shell ware) and in Israel as Judean thin walled ware (see Jaffa nos. 239–271).

At sites in Israel, mainly along the Coastal Plain and Judean Desert, they were imported in small numbers. In Jaffa three subtypes were found.

9.8.1.1. Honey Jars (Nos. 893–895)

These typical Italian beakers appeared in Jaffa.

The first was an undecorated example (893) dated at Tel Anafa and Samaria to the 1st century CE (Slane 1997:353, pl. 28:474; Crowfoot et al 1957: 298, fig. 69:3). A similar example appeared in Benghazi dated to the Augustan period (Kenrick 1985:309, fig. 58:445).

Two other fragments was identified as a honey jar with a thorn decoration (nos. 894–895). The thorn decoration was a technique favoured in the Augustan period and most commonly appeared on handleless beakers. More examples appeared in the Athenian Agora and in Benghazi dated to the 1st century BCE (Kenrick 1985:309, fig. 58:446). In Israel, the thorn decoration honey jar appeared in the Jewish Quarter of Jerusalem (Rosenthal-Heginbottom 2003:209, fig. 6.3:43). At Tel Anafa, a few fragments of thorn decorated vessels dated to the late 1st century CE (Slane 1997:351, 353 pl. 29:478–480).

Date range: 1st cent. BCE to 1st cent. CE

893 Beaker

Reg. No. A/70/B254.2; Area A, Sq. L4, Bucket 254

Rim diam.: 8; Max h.: 3.1

Plain rim, concave neck, rounded wall. Dark reddish-gray ware (5YR4/2), medium fired.

894 Beaker

Reg. No. 79/A/70/183; Area A, Sq. L3, Bucket 247

Rim diam.: 10; Max h.: 4.5

Plain rim, concave neck, rounded wall. High relief pattern of “rain drops” on the body. Dusky red ware (2.5YR4/3), hard fired.

895 Beaker

Reg. No. A/72/B35.1; Area A, Sq. K3 L3, Bucket 35

Body sherd with a “thorn pattern” in high relief. Dusky red ware (2.5YR4/3), hard fired.

9.8.1.2. Barbotine Applique Decoration (No. 896)

This common Italian decoration appears on cups and beakers, usually with a red slip. The slip can be gleaming or thin and dull. The barbotine decorated cups are quite rare in Israel. The Jaffa fragment is unique and has parallels in Oboda (Negev 1986:16, nos. 99–108) and Caesarea (author’s personal knowledge). More examples are known in Benghazi dated to the mid-1st century CE (Kenrick 1985:315, fig. 58:461), Cosa (Ty. LXI B dated to 14–37 CE) (Moevs 1973:183, pl. 39:360–1; 80:360–1), and Tarsus (Jones 1950, fig. 149).

Date range: 1st cent. BCE to 1st cent. CE

896 Vessel

Reg. No. 79/A/55/127; Area A

Body sherd with relief pattern of dolphin. Pink ware (5YR7/4), dark gray slip (5YR4/1), hard fired.

9.8.2. Eastern Terra Sigillata

The Eastern Terra Sigillata (ETS) dominated the fine ware imported in the eastern Mediterranean, from the late 2nd century BCE to the 2nd century CE. They included bowls, plates, and lagynoi and were used as tableware. The fabric is fine, hard fired, buff to ochre with small lime inclusions. The slip is a thick and lustrous covering by dipping the total vessel.

Their origin is still vague to some extent. Kenyan was the first to classify the eastern products into three classes, according to fabrics. That classification followed the former, which appeared in the Antioch report (Crowfoot et al 1957; Waagé 1948). The classification was widely adopted and repeated in reports of the eastern Mediterranean sites:

1. Eastern Terra Sigillata A (ETS A) is of Syrian origin, which includes Antioch as Waagé suggested (Waagé 1948).
2. Eastern Terra Sigillata B (ETS B) is from the Asia Minor region.
3. Eastern Terra Sigillata C (ETS C) is from Asia Minor (Candarli, near Pergamon in western Turkey).
4. Eastern Terra Sigillata D (CTS). The fourth class known today as Cypriot Terra Sigillata was coined by Hayes (Hayes 1967:98).

A new typology appeared in 1985 (Hayes 1985, Atlanta Typology), a corpus of all the Terra Sigillata finds throughout the Roman world. It proposes a new numbering system that is also employed for the Jaffa catalog.

In Jaffa, as typical for Israel, mostly ETS A and CTS appear. A few fragments of ETS B and only one sherd that probably belong to the Pontica TS have been found.

9.8.2.1. Eastern Terra Sigillata A (Nos. 897–951)

The ETS A was the earliest class, produced on a large scale. The ware was the standard fine ware at sites in Syria and Israel and was common in all eastern Mediterranean countries. It first appeared in 150 BCE and continued to do so until the early 3rd century CE (Hayes 1985:13–52). The center/centers of manufacture have not yet been established. At the earliest stage of manufacture they represented the change from black to red glaze, in form and fabric. At a later stage they developed original techniques and shapes, which spread and were copied in a number of manufacturing centers in the eastern Mediterranean.

A wide range of shapes have been found in Israel, mostly along the Coastal Plain. However, the most complete published Terra Sigillata corpus in Israel appeared in the report on the Samaria excavations (Crowfoot et al 1957) and Tel Anafa (Slane 1997). According to the published pottery and especially my studies of the Caesarea maritime ceramic corpus (fields NN, KK, CC) in Jaffa, the main Israel types were found which are represented at many other sites.

In the earlier shapes we can still see the resemblance to the black glazed forms as in Hayes *Type 2* (897–902). Type 2 was dated from the mid-2nd century BCE until 75/50 BCE according to Paphos (Hayes 1985:14, pl. I:4). That type appeared in small quantities during the 2nd half of the 2nd century BCE in Israel at Tel Anafa (Slane 1997:277, pl. 2:12–14, Type 3), Jerusalem (Hayes 1985:189, fig. 50:2), and Samaria (Crowfoot et al 1957:312–3, fig. 73:1–2). Bowl no. 901 was decorated on underside with graffiti. The graffiti tradition, characteristic of the black glazed ware, continued in the Terra Sigillata ware. The Greek letters Α, Ε, could be related to the god Apollo. It was a popular prefix in Hellenized Syria and Phoenician names of the Late Hellenistic and Roman Period (Slane 1997:343). Below the two Greek letters appeared probably the name of the owner of the dish.

One of the most common shapes in Israel is the Hayes *Type 4*. The type was divided into two subtypes. In Jaffa, several bowls appeared attributed to Type 4B with relatively shallower walls dated from 27 BCE to 14 CE (Hayes 1985:16, pl. I:12; Waagé 1948: 23, pl. iv:126x) (nos. 903–908). Very often they are decorated on the floor with a concentric roulette pattern enclosing a stamped decoration of palmettes (908), a remnant

of the Hellenistic fine ware tradition. In Israel, this type seems to be the most popular mainly at Coastal Plain and Judean sites. At Tel Anafa, 2377 sherds were recovered that were divided according to chronological development to four subtypes dated from the 2nd to the 1st century BCE. The earlier one can be paralleled with the Hayes Type 2 and the later with the Hayes Type 4. Jaffa's examples can be compared to the Tel Anafa Type 13c dated from the late 2nd to the 1st century BCE (Slane 1997:285–6, pls.7–11). More examples appeared during the 1st century BCE at the Coastal Plain sites in Caesarea (Berlin 1992:115, and fig. 52:5), Ramat Hanadiv (Calderon 2000:98, and pl. IV:63–4), and Ashdod (Dothan 1962:29–30, and fig. 10:6). The type was common as well at pagan and Jewish Judean sites such as Oboda (Negev 1986:21–2, and no.138), Nessana (Baly 1962:282, and pl. XLIII:Goup A1–3), or Herodium (Bar-Nathan 1981:64, fig. 10:14–15), Machaerus (Loffreda 1996:107, fig. 48:13–19), and Jerusalem (Hayes 1985:189, fig. 50:5–13; Rosenthal-Heginbottom 2003:198, pl. 6.7:2–3).

Hayes *Type 6* is dated to the late 2nd century until 50 BCE (Hayes 1985:18, pl. II:3–4). In Jaffa, it is rather rare and only lip fragments survived (909–910). More examples appeared at Tel Anafa (Slane 1997:276, 283–4, pl. 2:PW11), Samaria (Crowfoot et al 1957: 325, and fig. 77:1), Oboda (Negev 1986:23, and no.152), and Hama (Papanicolaou 1971:78–80, fig. 33:1–2).

Type 7 is dated to 50–1 BCE (Hayes 1985:18, pl. 2:5) (911). The type was well represented at Tel Anafa (Slane 1997:301–2, pl.15:PW149) as well as Ramat Hanadiv (Silberstein 2000:457, fig. XVII:7,12). However, many examples were recovered from the Samaria region (Crowfoot et al 1957:296, fig.77.3–5) and the Jewish Quarter in Jerusalem (Rosenthal-Heginbottom 2003:203, pl. 6.11:12; Hayes 1985:189, fig. 51:1–5).

The next Hayes types, *Type 9* and *11* with flared and infolded rim bowl comes in two sizes and with rim shape variations which was attributed in Hama to a single *Type 8* (Papanicolaou 1971:84–88, fig. 33:1–18; 36:19–23). *Type 9* was dated to 50–25 BCE (Hayes 1985:18–19, pl. II:7) (912–914). In Israel, the type appeared generally in small numbers at the Coastal Plain site in Ramat Hanadiv (Silberstein 2000:457, fig. XVIII:21), Jerusalem (Hayes 1985:189, fig. 51:7–9), and Samaria (Crowfoot et al 1957:327–8, fig. 78:1–7). *Type 11* was dated to 50–20/1 BCE (Hayes 1985:19, and pl.II:9) (915–917). Other examples appeared in Samaria (Crowfoot et al 1957:327–8, fig. 78:8) and the Jewish Quarter in Jerusalem (Rosenthal-Heginbottom 2003:198, pl. 6.7:6; Hayes 1985:189, fig. 51:10).

Hayes *Type 13* was dated from 50 BCE to the early 1st century CE (Hayes 1985:18–19, pl. II:12) (918–919). No parallels were found in Israel.

Hayes *Type 17B* was dated to the 2nd half of the 2nd century BCE (Hayes 1985:21, pl. III:4)(920). Examples were recovered in Yoqne'am (Avisar 1996:48, fig. X.1:23–26), Ashdod (Dothan 1971:55, fig.16:14), and Samaria (Crowfoot et al 1957:335, fig.80:15).

Hayes *Type 18* was dated from the late 2nd to the 1st century BCE (Hayes 1985:22, pl. III:5) (921–922). In Israel, the type was found at Tel Anafa dated to the early 1st century CE (Slane 317, pl. 21:228).

The second most common vessel in Jaffa as well as in other sites is the hemispherical cup, Hayes Type 22 A and B. Like the former Type 2 plates, their antecedent appeared already in the echinus black glazed bowls. In Jaffa, both subtypes appeared: *Type 22A* characterized by a thin wall with a concentric roulette pattern on the floor and a plain steep rim (923–926) while *Type 22B* displays a slightly flared lip and a shallower body with a flattened floor (927–931). Both are dated from the late 2nd century BCE to 10 CE (Hayes 1985:23, pl. III:11–13). However, the type is most common throughout Israel and appeared in the north at Tel Anafa (Slane 1997:312–3, and pl. 20:205–6), Beth-Shean (Fitzgerald 1931:39, pl. 34:25,29), Yoqne'am (Avisar 1996:48, fig. x.1:18–21), and along the Coastal Plain in Dor (Stern 1995:219, fig. 5.7:1), Caesarea (Roller 1980:40, fig. 2:17; Oleson 1994:111, fig. 36:RG117), and Ramat Hanadiv (Calderon 2000:98, pl. IV:67; Silberstein 2000:457, fig. XVII:3–5). In the interland, examples were found in Samaria (Crowfoot et al 1957:291, 295, 298, fig. 65:1–2; 67:10; 68:9; 80:1–8), the Jewish Quarter in Jerusalem (Rosenthal-Heginbottom 2003:198, pl. 6.7:10 9; Hayes 1985:189, fig. 52:1–6), Machaerus (Loffreda 1996:107, fig. 48:1–6) and Oboda (Negev 1986:24–5, nos.162–163).

Hayes *Type 24* is dated from the 1st century BCE to the 1st century CE (Hayes 1985:24–25, pl. IV:1–3). The type was mostly a remnant of the relief hemispherical bowl influence on pottery manufacture. Moulded bowls began to be made on a large scale in Syrian workshops during the mid-1st century BCE as we can see represented in the Jaffa catalog (see nos. 868–881). In addition, another relief bowl imitation was manufactured under the Eastern Terra Sigillata A tradition. A few examples were found in Jaffa. The decorated bowls include a traditional decoration of acanthus leaves (no. 936), and an ovolo pattern (nos. 932–934). Both

patterns were the second and third most popular decorative motif among the Tel Anafa molded relief bowls.⁸⁰ More examples of acanthus leaves decorated bowls were recovered in Ramat Hanadiv (Silberstein 2000:457, fig. XVII:15) and Jerusalem (Hayes 1985:189, fig. 52:8). The ovolo pattern is attested at Dor (Stern 1995:215, fig. 5.5:15), Caesarea (Roller 1980:41, fig. 2:35; Oleson 1994:146, fig. 55:RG197), and in Jerusalem (Tushingham 1985:189, fig. 52:7).

Hayes *Type 42* is dated to 10 BCE–20/30 CE (Hayes 1985:32–33, pl. VI:6) (943–944). Like the former hemispherical cup, it could have been an imitation of the paralleled outcurved rim black glazed bowls. At Tel Anafa, 103 pieces were recovered dated to the 1st century BCE (Slane 1997:318–9, pl. 22:236–245). More examples appeared in Ramat Hanadiv (Silberstein 2000:459, fig. XVIII:4–6) and Samaria (Crowfoot et al 1957:336, fig. 81:1–2).

Hayes *Type 51* is dated to 70–120 CE (Hayes 1985:37, pl. VI:19) (945–947). A single example appeared in Shiqmona (Elgavish 1977:46, pl. 8:55).

Type 56 is dated to the 2nd half of the 2nd century CE (Hayes 1985:39, pl. VII:7) (948). More examples appeared in Shiqmona (Elgavish 1977:46, pl. 8:52), Samaria (Crowfoot et al 1957:326–7, fig. 77:8), and Nessana (Baly 1962:282, pl. XLIII:Group D 1)

From the end of the 1st until the mid-3rd century CE, distribution in Israel was limited and the range of shapes was rather small. In Jaffa, the Eastern Terra Sigillata is totally absent despite its appearance in small quantities at other sites.

Other miscellaneous bowl bases were decorated with the typical concentric palmettes Isis crown and rosette (949–951).

897 Plate

Reg. No. 79/A/58/145; Area A

Rim diam.: 26; Base diam.: 8.5; Max h.: 5

Incurved rim, ring base. Dark red slip (2.5YR4/8), hard fired.

898 Plate

Reg. No. A/70/B204.1; Area A, Sq. K4, Bucket 204

Rim diam.: 36.5; Max h.: 2.5

Incurved rim, rounded wall. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

899 Plate

Reg. No. A/70/B360.2; Area A, Sq. L3, Bucket 360

Rim diam.: 30.5; Max h.: 2

Incurved rim, rounded wall. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

900 Plate

Reg. No. A/70/B139; Area A, Sq. K3, Bucket 139

Base diam.: 8.1; Max h.: 3

Wide floor, thickened ring base. Three concentric circles at center of floor. Pink core (5YR7/4), dark red slip (2.5YR4/6), hard fired.

901 Bowl

Reg. No. 79/A/56/024; Area A, Sq. I8

Base diam.: 9; Max h.: 2.4

Ring base. Two concentric circles of roulette pattern on the floor. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

902 Bowl

Reg. No. 79/A/70/203; Area A, Sq. L3, Bucket 257

Base diam.: 9; Max h.: 2.5

Thickened ring base. Three concentric circles of roulette pattern on the floor. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

903 Plate

Reg. No. 79/A/70/190; Area A, Sq. K3, Bucket 125

⁸⁰ Slane 1997:409, pl. 1:5–12. The ETS A Relief Bowls were published with the BSP Relief bowls (i.e., Jaffa Eastern Relief Bowl).

Rim diam.: 20; Base diam.: 15.5; Max h.: 3.7

Pointed rim, rounded wall slightly carinated at junction with flat floor, thickened ring base. Pink core (5YR7/4) dark red slip (2.5YR4/8) hard fired.

904 Bowl

Reg. No. 79/C/61/431; Area C, Sq. CC101, Bucket 645

Rim diam.: 22; Base diam.: 14.2; Max h.: 4

Pointed rim, rounded, slightly carinated at junction with flat floor, thickened ring base. Very pale brown ware (10YR8/4), dark red slip (2.5YR4/8), many small black slip, hard fired.

905 Bowl

Reg. No. 79/A/70/189; Area A, Sq. L3, Bucket 245

Rim diam.: 16; Base diam.: 9; Max h.: 3

Pointed rim, rounded slightly carinated at junction with flat floor, thickened ring base. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

906 Plate

Reg. No. 79/C/64/055; Area C

Base diam.: 21; Max h.: 2

Flat floor, thickened ring base. Reddish-yellow ware (5YR6/6), dark red slip (2.5YR4/8), many minute white and black grits, hard fired.

907 Plate

Reg. No. 79/C/64/056; Area C

Base diam.: 17; Max h.: 3.5

Thickened ring base. Pink ware (5YR7/4) and reddish-yellow core (5YR6/6), dark red slip (2.5YR4/8), hard fired.

908 Bowl

Reg. No. 79/A/70/204; Area A, Sq. L3, Bucket 241

Base diam.: 9.5; Max h.: 1.7

Thickened ring base. Alternating palmettes between two groups of three and four concentric circles on the floor. Pink core (5YR7/4), dark red slip (2.5YR4/8) hard fired.

909 Plate

Reg. No. A/70/B161.5; Area A, Sq. K3, Bucket 161

Rim diam.: 35; Max h.: 2.2

Pointed rim, flaring wall. Reddish-yellow core (5YR6/6) dark red slip (2.5YR4/6), hard fired.

910 Plate

Reg. No. A/72/B81; Area A, Locus 703, Bucket 81

Rim diam.: 34; Max h.: 2.2

Pointed rim, flaring wall. Reddish-yellow core (5YR6/8), dark red slip (2.5YR4/8), many minute black grits, hard fired.

911 Plate

Reg. No. A/70/B189.1; Area A, Sq. K3, Bucket 189

Rim diam.: 44; Max h.: 4.5

Inverted rim with overhanging lip, flat floor, carinated wall. Pink core (7.5YR7/4), dark red slip (2.5YR4/6), many minute black grits, hard fired.

912 Plate

Reg. No. 79/D/63/060; Area D, Bucket 40

Rim diam.: 46.5; Max h.: 3

Inverted rim with overhanging lip and grooved inside, carinated wall.

Egg-and-dart pattern on the rim exterior. Pink core (7.5YR8/4), dark red slip (2.5YR3/6), hard fired.

913 Plate

Reg. No. 79/A/56/220; Area A, Sq. F6

Rim diam.: 37; Max h.: 4.5

Inverted rim with overhanging lip and grooved inside, carinated wall.

Egg-and-dart pattern on the rim exterior. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

914 Bowl

Reg. No. 79/A/70/263; Area A, Sqs. K3–K4, Bucket 126

Rim diam.: 14.5; Max h.: 2

Inverted rim with overhanging lip and grooved inside, carinated wall.

Egg-and-dart pattern on the rim exterior. Reddish-yellow core (5YR7/6) dark red slip (2.5YR4/8), hard fired.

915 Bowl

Reg. No. 79/C/65/582; Area C, Sq. CC102, Bucket 986

Rim diam.: 16; Base diam.: 8; Max h.: 3.6

Flared rim with overhanging and slightly upturned lip and grooved inside, concave wall sharply carinated at junction with floor, wide ring base. Egg-and-dart pattern on the rim exterior. Pink core (7.5YR7/4), dark red slip (2.5YR4/8), many minute black grits, hard fired.

916 Bowl

Reg. No. C/65/646; Area C, Sq. DD103, Locus 443, Bucket 869

Base diam.: 7.5; Max h.: 3.5

Concave wall sharply carinated at junction with floor, wide ring base. Pink core (7.5YR7/4), dark red slip (2.5YR4/6), many small white grits, hard fired.

917 Bowl

Reg. No. 79/C/61/394; Area C, Sq. DD102, Locus 424, Bucket 497

Rim diam.: 13; Max h.: 1.6

Flared rim with overhanging and slightly upturned lip and grooved inside, concave wall. Egg-and-dart pattern on the rim exterior. Reddish-yellow core (7.5YR7/6), dark red slip (2.5YR4/6), hard fired.

918 Bowl

Reg. No. 79/Y/68/365; Area Y, Sq. Y13, Bucket 55

Rim diam.: 7.7; Base diam.: 4.7; Max h.: 3.2

Flared rim, concave wall sharply carinated at junction with flat floor, ring base. Very pale brown core (10YR8/3), dark red slip (2.5YR4/6), hard fired.

919 Bowl

Reg. No. 79/A/70/193; Area A, Sq. L3, Bucket 230

Base diam.: 5.5; Max h.: 2.7

Concave wall sharply carinated at junction with flat floor, ring base. Pink core (5YR7/3), dark red slip (2.5YR4/8), hard fired.

920 Bowl

Reg. No. 79/A/55/111; Area A, Locus B

Molded rim, wall with inner grooves. Pink core (5YR8/3), very dark gray slip (5YR3/1), medium fired.

921 Bowl

Reg. No. 79/A/60/003; Area A, Sq. H11, Locus 350, Bucket 57

Rim diam.: 13.5; Max h.: 9

Sharp pointed rim, hemispherical wall, rounded base. Pale red core (2.5YR7/4), dark red slip (2.5YR4/8), hard fired.

922 Bowl

Reg. No. 79/Y/68/328; Area Y, Bucket 35

Rim diam.: 15.5; Max h.: 8

Plain rim, hemispherical wall. Two concentric circles of roulette pattern on the floor. Light red core (2.5YR7/6), internal red slip (2.5YR5/6) and external dusky red slip (2.5YR3/2), hard fired.

923 Bowl

Reg. No. 79/A/56/255; Area A, Sq. I9

Rim diam.: 18; Base diam.: 8.5; Max h.: 8.5

Plain rim, hemispherical wall, ring base. Reddish-yellow core (5YR7/6), dark red slip (2.5YR4/6), hard fired.

924 Bowl

Reg. No. 79/Y/68/333; Area Y, Bucket 35

Rim diam.: 16; Base diam.: 8; Max h.: 9

Plain rim with pointed lip, hemispherical wall, grooved ring base. Concentric circle of roulette pattern on the floor. Reddish-yellow core (5YR7/6), dark red slip (2.5YR4/6), hard fired.

925 Bowl

Reg. No. 79/A/58/072; Area A, Sq. H.11

Rim diam.: 15; Base diam.: 7; Max h.: 8

Sharp rim, hemispherical wall, ring base. Dark red slip (2.5YR4/8), hard fired.

926 Bowl

Reg. No. 79/X/60/013; Sounding X, Bucket 40

Rim diam.: 13.2; Base diam.: 6.1; Max h.: 7

Sharp rim, hemispherical wall, ring base. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

927 Bowl

Reg. No. C/65/650; Area C, Bucket 803

Base diam.: 6.4; Max h.: 5.9

Hemispherical wall, ring base. Reddish-yellow core (5YR7/6), dark red slip (2.5YR4/8), hard fired.

928 Bowl

Reg. No. C/61/619; Area C, Bucket 653

Rim diam.: 12; Base diam.: 5.5; Max h.: 8

Plain rim with pointed lip, hemispherical wall, high ring base grooved at bottom. Red core (2.5YR6/8), dark red slip (2.5YR4/6), hard fired.

929 Bowl

Reg. No. C/65/648; Area C, Sq. CC102, Locus 449, Bucket 1004

Rim diam.: 15.5; Max h.: 6

Plain slightly flared rim, rounded wall. Reddish-yellow core (5YR7/6), dark red slip (2.5YR4/8), few minute black grits, medium fired.

930 Bowl

Reg. No. A/70/B271; Area A, Sq. L4, Bucket 271

Rim diam.: 11; Max h.: 5

Slightly flared rim, hemispherical wall. Dark red ware (2.5YR4/6) and pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

931 Bowl

Reg. No. A/70/B314.2; Area A, Sq. L4, Bucket 314

Rim diam.: 13; Max h.: 5.5

Slightly flared rim, hemispherical wall. Pink core (7.5YR7/3), dark red slip (2.5YR4/6), hard fired.

932 Bowl

Reg. No. 79/A/70/262; Area A, Sq. K3, Bucket 37

Rim diam.: 14; Max h.: 4

Flared rim, hemispherical wall. Row of egg-and-dart pattern encircled by roulette, on external face. pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

933 Bowl

Reg. No. 79/A/70/264; Area A, Sq. J3, Bucket 45

Rim diam.: 13.5; Max h.: 3.5

Flared rim, hemispherical wall. Row of egg-and-dart pattern encircled by roulette, on external face. pink core (5YR8/4), dark red slip (2.5YR4/8), hard fired.

934 Bowl

Reg. No. 79/A/70/197; Area A, Sq. L3, Bucket 264

Sharp rim. Row of "hearts" pattern, on external face. pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

935 Bowl

Reg. No. 79/C/61/395; Area C, Sq. DD102, Locus 425, Bucket 475

Base diam.: 3.3; Max h.: 3.5

Rounded spherical wall and base. Rosette surrounded by concentric decoration with free palmette, two Ionic columns and two running deers on external face. yellow core (10YR7/6), dark red slip (2.5YR4/8), a few minute black grits, hard fired.

- 936 Vessel
Reg. No. 79/A/56/222; Area A, Sq. H9
Body fragment decorated with floral relief pattern. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.
- 937 Vessel
Reg. No. 79/A/70/162; Area A, Sq. L3, Bucket 270
Body fragment decorated with human figure (dancer ?) appliqué. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.
- 938 Vessel
Reg. No. 79/A/70/200; Area A, Sq. L3, Bucket 346
Body fragment decorated with female figure riding on horse with a rope (Amazon ?). pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.
- 939 Vessel
Reg. No. 79/A/56/225; Area A, Sq. I9
Body fragment decorated with alternating pendant drops pattern. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.
- 940 Vessel
Reg. No. 79/C/65/566; Area C, Sq. CC102, Locus 454, Bucket 1008
Max h.: 3.2
Wall fragment with concentric incised fluted patterns. Weak red core (2.5YR6/3), external black slip and internal dusky red slip (2.5YR4/4), many minute white grits, hard fired.
- 941 Vessel
Reg. No. 79/A/56/224; Area A, Sq. H7 (x)
Body fragment with uncertain relief pattern? Pink ware (5YR7/4), dark red slip (2.5YR4/8), hard fired.
- 942 Vessel
Reg. No. 79/A/55/118; Area A
Body fragment decorated with sun(?) pattern. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.
- 943 Bowl
Reg. No. A/70/B305.1; Area A, Sq. L4, Bucket 305
Rim diam.: 12; Max h.: 4
Flared rim, concave wall carinated at junction with sloping floor. Pink core (5YR7/4), dark red slip (2.5YR4/6), hard fired.
- 944 Bowl
Reg. No. C/65/651; Area C, Sq. CC101, Bucket 820
Rim diam.: 11; Max h.: 4
Flared rim, concave wall carinated at junction with sloping floor. Pink core (7.5YR7/6), dark red slip (2.5YR4/8), hard fired.
- 945 Bowl
Reg. No. 79/A/70/151; Area A, Sq. L3, Bucket 222
Rim diam.: 8; Base diam.: 5.2; Max h.: 3.5
Incurved rim, rounded wall, ring base. Pink ware (5YR7/4), dark red slip (2.5YR4/8), hard fired.
- 946 Bowl
Reg. No. C/65/B1050.2; Area C, Sq. DD103, Locus 456, Bucket 1050
Rim diam.: 12; Max h.: 2
Incurved rim. Pink core (5YR7/4), dark red slip (2.5YR4/6), hard fired.
- 947 Bowl
Reg. No. C/65/B1041.1; Area C, Sq. CC103, Locus 451, Bucket 1041
Rim diam.: 9.5; Max h.: 2
Incurved rim. Pink core (5YR7/4), dark red slip (2.5YR4/6), hard fired.
- 948 Krater
Reg. No. 79/G/64/061; Area G, Sq. 29, Bucket 77,80,81
Rim diam.: 30.5; Max h.: 4.4

Thick rim, slightly carinated wall. Very pale brown ware (10YR8/3), internal red slip (2.5YR5/8) with bands of red color on the exterior. A few small black grits, hard fired.

949 Vessel

Reg. No. 79/A/70/209; Area A, Sq. K3, Bucket 193

Flat floor; single rosette on center of floor surrounded by concentric roulette pattern alternated with concentric palmettes pattern. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

950 Vessel

Reg. No. 79/C/61/565; Area C;

Base fragment with three concentric grooves with Isis crown stamp above. Pink core (7.5YR8/4), dark red slip (2.5YR4/8), hard fired.

951 Vessel

Reg. No. 79/A/56/226; Area A, Sq. E.8

Body fragment with concentric two roulette pattern encircled by rosettes, a row of incised triangles and concentric grooves. Pink core (5YR7/4), dark red slip (2.5YR4/8), hard fired.

9.8.2.2. Eastern Terra Sigillata B

This class appeared during the 1st–2nd century CE, mostly at sites around Asia Minor. At Corinth, this fabric is the second most common type of the imported ware (Hayes 1973:452). In Israel it is very rare. The restricted distribution here may be due to incorrect identification by the scholar, or a result of their rarity. The fabric is hard fired to reddish-brown colors and frequently micaceous. The slip is in orange colors, rather soft and porous and has the quality of a soapy or waxy lustrous surface.

A few examples appeared in Jaffa, most of them unparalleled in Israel. A few examples were published from the Armenian Garden in Jerusalem (Tushingham 1985:fig. 58:8–11), however none of them are identical to the Jaffa fragments.

Hayes types 3 and 9 were identified at Tel Anafa as “Imitation of Western Form” (Slane 1997 306–7 pl.16:PW165–171). However, the Jaffa types are well known at sites throughout Israel. *Type 3* is dated to the Augustan period (Hayes 1985:53, pl.XI:11) (no. 952). Examples appeared at Tel Anafa (Slane 1997:306–7, pl. 16:PW165), Jerusalem (Hayes 1985:189, fig. 52:9–10), and Old Cairo (Hayes 1976:20, fig. 4:90). *Type 9* is dated to 30–50 CE and was defined as an eastern version of the Dragendorff Type 16. (Hayes 1985:55, pl..XII:1) (no. 953). A few examples appeared at Tel Anafa (Slane 1997:306–7, pl. 16:PW169) and in the Royal Ontario Museum (Hayes 1976: 20, fig. 4:91). *Type 13B* is dated to 25–50 CE (Hayes 1986:55–56, pl.XII:5; Hayes 1976:20, fig. 4:92) (no. 954). *Types 37–38* are dated to 50–100 CE (Hayes 1985:60–61, pl. XIII:7–8) (nos. 955–956). Examples appear at Oboda (Negev 1986:33, 34, no. 255).

A single unique rim fragment with a stamped decoration below the external rim had no parallels (no. 957) as well as base fragments with a concentric stamp surrounded with concentric grooves (no. 958).

952 Bowl

Reg. No. 79/A/70/194; Area A, Sq. K3, Bucket 71

Rim diam.: 18.5; Base diam.: 10.5; Max h.: 3.2

Slightly outcurved and grooved inside rim, carinated wall with two inside ridges, flat floor, wide ring base. Concentric roulette pattern on the floor. Reddish-yellow core (5YR7/6), red slip (2.5YR5/6), hard fired.

953 Bowl

Reg. No. 79/A/70/195; Area A, Sq. J3, Bucket 52

Rim diam.: 24.5; Max h.: 3.5

Small flanged rim, low bulging wall raised from floor by a small offset. Pink core (7.5YR8/4), dark red slip (2.5YR4/8), hard fired.

954 Bowl

Reg. No. 79/A/73/132; Area A, Bucket 559

Rim diam.: 28; Base diam.: 16.5; Max h.: 4

Outcurved rim grooved inside, low curved wall, flat floor, low ring base. Reddish-yellow ware (5YR7/6), red slip (2.5YR5/8), hard fired.

955 Bowl

Reg. No. C/61/B170; Area C, Sq. IV, Bucket 170

Incurved rim, sloping wall. Red core (2.5YR6/6), red slip (2.5YR5/8), many minute silver mica, hard fired.

956 Bowl

Reg. No. C/61/B45; Area C, Locus 404, Bucket 45

Incurved rim, sloping wall. Red core (2.5YR6/6), red slip (2.5YR5/8), many minute silver mica, hard fired.

957 Bowl

Reg. No. C/61/B133.2; Area C, Sq. DD100, Locus 414, Bucket 133

Rim diam.: 17.5; Max h.: 3

Thickened rim grooved on outer face, sloping wall. Red core (2.5YR6/6), red slip (2.5YR5/8), many minute silver mica, hard fired.

958 Bowl

Reg. No. 79/A/58/076; Area A, Sq. G.12

Rim diam.: 0; Base diam.: 11.5; Max h.: 1.5

Flat floor, wide ring base. Concentric grooves and potter stamp on center of the underside. Red core (2.5YR6/8), dark red slip (2.5YR4/8), many minute silver mica, hard fired.

9.8.2.3. Cypriot Terra Sigillata

This class of ware was only recently identified. The appearance of CTS in large quantities in the Oboda potter's workshop gave rise to the idea that they were locally manufactured in the southern Palestinian region (Negev 1974). However, the ware was common at many other sites in Israel and beyond, in an Early Roman context. Hayes definition of the ware as Cypriot ware is currently the most repeated, since the fabric and manufacturing technique is similar to the fine wares used in Cyprus (Hayes 1967:66; 1991:37–8). The ware was hard fired to a dark red color. The slip tended to be metallic in many cases or of dark red to brown colors. The external wall is often decorated with a roulette pattern, a technique that inspired Negev to connect the ware to Nabatean manufacture.

The distribution of CTS ware in Israel is limited. This class was common during a restricted period, from the early 1st to the end of the 2nd century CE, and had a small variety of forms. At Tel Anafa, the type is represented in a small range of types and mostly in levels of the 1st half of the 1st century CE (Slane 1997:376–8 pl. 36:575–593). In Jerusalem, small numbers of fragments appeared as well, but most of them are not parallel with the Jaffa repertoire.

The variety of the Hayes forms represented in Jaffa is much greater than the one characteristic of the Israel repertory. However, most of them were unparalleled at sites in Israel. For example, Type 29 is most common in Jaffa but is completely missing from the corpus in Israel.

Type 4B is dated to the early 1st century CE according to the Paphos examples (Hayes 1985:81, pl. XVIII:9; Hayes 1991 42 and fig. XVIII:2) (no. 959). Examples appeared at Ashkelon (Johnson 2008a:34, nos. 107–109). *Type 11* is dated to 50–150 CE (Hayes 1985:82–3, pl. XIX:2–3) (nos. 960–961). Examples appeared in Paphos (Hayes 1991:48, fig. XVIII:11.2), Nicosia (Hayes 1967:72, and 71, Form 10:CM), and Anemurium (Williams 1989:5, and fig. 2:16). In Israel, the type was familiar throughout Judea and appeared in Jerusalem (Hayes 1985:192, fig. 59:6), at Oboda (Negev 1986:34, 35, no. 261), and Machaerus (Loffreda 1996:107, fig. 48:22). Additional examples appeared in Ashkelon (Johnson 2008a:36, no. 112–113). *Type 22* is dated to the late 1st century CE (Hayes 1985:84–85, pl. XIX:15) (no. 962). *Type 29* is dated to 100–150 CE in Paphos (Hayes 1985:86, pl. XX:8; Hayes 1991:49, fig. XIX:29) (nos. 963–968). At Ashkelon were found two rim fragments (Johnson 2008a:38, nos. 120–121). At Oboda, the type has an outfolded tiny lip and is characterized firstly by its metallic slip (Negev 1986:30–33, nos. 218–247). However, the Jaffa examples lack the unique lips. *Type 30* is dated to 100–150 CE in Paphos (Hayes 1985:86, and pl. XX:9; Hayes 1991:44, and fig. XIX:30,2–5) (969–970). A single example appears at Ramat Hanadiv (Silberstein 2000:461, pl.

XIX:3) and Ashkelon (Johnson 2008a:38, no. 122). *Type 37–38* seems similar to no. 974 (Hayes 1985:87–88, pl. XXI:1–3).

Type 40 is dated to 100–150 CE in Paphos (Hayes 1985:88, and pl. XXI:4–5; Hayes 1991:45, and fig. XIX:42.1; XX:12) (nos. 971–973). *Type 40* was common and popular in Israel during the 2nd half of the 2nd century CE and appeared in northern Tel Anafa (Slane 1997:376–7, pl. 36:583–4), along the shore in Caesarea (Blakely 1987:129, and fig. 38:146), Ashkelon (Johnson 2008a:39, no. 123), and Ashdod (Dothan 1962:33, fig. 13:2). More examples appeared in Samaria (Crowfoot et al 1957:344, fig. 83:3–4,9), in Judea in Jerusalem (Tushingham 1985:192, and fig. 60:6), and the Negev in Oboda (Negev 1986:28, no.195). The type appeared as well in Benghazi (Riley 1985:270, fig. 49:384.1) and Anemurium (Williams 1989:7, and fig. 3:31).

In Jaffa, many base fragments appeared (nos. 975–980). A few can be connected to bowls *Types 8–9* are dated to the 1st century BCE (Hayes 1985:82, pl. XVIII:14–15) (nos. 975–978). A few others connected to bowls *Types 27–28* are dated to the 1st century BCE (Hayes 1985:85–6, pl. xx:5–7) (nos. 979–980).

959 Bowl

Reg. No. 79/C/61/432; Area C, Bucket 40

Rim diam.: 27; Base diam.: 11; Max h.: 3.5

Flared rim with over hanging lip, sloping wall, flat base concave on underside. Reddish-yellow core (7.5YR6/8), red slip (2.5YR5/8), hard fired.

960 Bowl

Reg. No. C/65/638; Area C, Sq. CC102, Bucket 978

Rim diam.: 27; Max h.: 4.5

Flared knobbed rim, thick rounded wall. Red core (2.5YR5/6), dark red slip (2.5YR4/6), hard fired.

961 Bowl

Reg. No. 79/A/73/139; Area A, Bucket 391

Rim diam.: 28; Max h.: 3.3

Flared rim with overhanging lip, sloping wall. Roulette pattern on rim exterior. Red core and slip (2.5YR5/8), hard fired.

962 Bowl

Reg. No. 79/A/70/205; Area A, Sq. L4, Bucket 357

Base diam.: 13; Max h.: 5.3

Carinated wall, ring base. Free palmette pattern inside concentric roulette pattern, on the floor. Light brown ware (7.5YR6/4), red slip (2.5YR5/8), hard fired.

963 Bowl

Reg. No. 79/A/70/134; Area A, Sq. J3, Bucket 65

Rim diam.: 12.5; Base diam.: 6.3; Max h.: 4.2

Incurved rim, rounded wall, ring base. Pink core (7.5YR7/4), red slip (2.5YR5/6), a few medium white grits, hard fired.

964 Bowl

Reg. No. 79/A/58/144; Area A

Rim diam.: 13.8; Base diam.: 5.7; Max h.: 5.2

Incurved rim, rounded wall, ring base. Pale red ware (2.5YR7/4), dusky red and dark red slip (2.5YR4/3; 4/8), hard fired.

965 Bowl

Reg. No. 79/A/56/169; Area A, Sq. G.5

Rim diam.: 12.5; Base diam.: 6.5; Max h.: 4.5

Incurved rim, rounded wall, ring base. Red Slip on internal and upper external wall. Light reddish-brown core (5YR6/4), weak red slip (2.5YR5/4), hard fired.

966 Bowl

Reg. No. 79/A/73/130; Area A, Bucket 50

Rim diam.: 11; Base diam.: 5.5; Max h.: 4.7

Incurved rim, rounded wall, ring base. Red core and slip (2.5YR5/6), hard fired.

967 Bowl

Reg. No. 79/Y/68/337; Area Y, Sq. X12, Locus L-2, Bucket 20

Rim diam.: 10; Base diam.: 6; Max h.: 3.4

Incurved rim, rounded wall, ring base. Reddish-yellow core (5YR6/6), dusky red slip (2.5YR4/3), hard fired.

968 Bowl

Reg. No. C/65/B1040.2; Area C, Sq. DD103, Locus 456, Bucket 1040

Base diam.: 4; Max h.: 2.8

Rounded wall, ring base. Red core (2.5YR6/6), red slip (2.5YR5/8), hard fired.

969 Bowl

Reg. No. 79/C/65/583; Area C, Sq. CC102, Locus 454, Bucket 1008

Rim diam.: 12; Base diam.: 5; Max h.: 4.3

Thickened flared rim, heavy rounded wall, ring base. Reddish-yellow core (5YR6/6), red slip (2.5YR5/8), hard fired.

970 Bowl

Reg. No. C/65/B983.1; Area C, Sq. CC102, Bucket 983

Rim diam.: 13.6; Max h.: 3

Thickened flanged rim, sloping wall. Reddish-yellow core (5YR6/8), red slip (2.5YR5/8), hard fired.

971 Bowl

Reg. No. 79/C/61/444; Area C, Sq. DD102, Locus 424, Bucket 510, 586

Rim diam.: 33; Base diam.: 14.5; Max h.: 17

Rim convex on top, with grooved edge, slightly carinated shoulder, rounded wall, ring base, two horizontal handles stressed to the body at carination. Two rows of roulette pattern on the exterior, below wall carination. Dark red slip (2.5YR4/6), hard fired.

972 Bowl

Reg. No. C/61/B287.4; Area C, Sq. DD102, Bucket 287

Rim diam.: 32.5; Max h.: 4.5

Rim convex on top, with grooved edge, grooved shoulder. Red core (2.5YR6/6), red slip (2.5YR5/6), hard fired.

973 Bowl

Reg. No. c/61/B134.3; Area C, Sq. DD100, Locus 414, Bucket 134

Rim diam.: 17.5; Max h.: 2.5

Outfolded rim, straight upper wall. Roulette pattern on external wall. Reddish-brown core and slip (5YR5/3; 5/4).

974 Bowl

Reg. No. C/65/B1042.1; Area C, Sq. DD103, Locus 458, Bucket 1042

Rim diam.: 22.6; Max h.: 2.5

Flared grooved rim, slightly concave wall. Reddish-yellow core (5YR6/6), red slip (2.5YR5/8), hard fired.

975 Plate

Reg. No. 79/A/56/023; Area A

Base diam.: 10; Max h.: 4

Sloping wall, high ring base. Greek letters on the exterior. Reddish-yellow core (5YR7/6), red slip (2.5YR5/8), hard fired.

976 Plate

Reg. No. 79/A/70/201; Area A, Sq. K3, Bucket 103

Base diam.: 15; Max h.: 3.4

Sloping wall, ring base. Free palmette between two groups of concentric circles of roulette pattern on the floor. Reddish-yellow core (5YR6/6), dark red slip (2.5YR4/8), hard fired.

977 Plate

Reg. No. 79/A/70/210; Area A, Sq. L4, Bucket 276

Base diam.: 8.8; Max h.: 3

Sloping wall, ring base. Three concentric roulette pattern on the floor. Reddish-yellow core (5YR7/6), red slip (2.5YR5/6), hard fired.

978 Bowl

Reg. No. 79/A/70/202; Area A, Sq. L3, Bucket 247

Base diam.: 8; Max h.: 2.2

Ring base. Concentric roulette pattern on the floor.

979 Bowl

Reg. No. 79/A/55/110; Area A, Sq. H8, Locus 3B

Base diam.: 7; Max h.: 6

Rounded wall, ring base. Potter's mark (O.P) on the underside. Reddish-yellow core (5YR6/6), reddish-brown slip (5YR5/4), hard fired.

980 Bowl

Reg. No. 79/A/58/077; Area A, Sq. H.12

Base diam.: 7.5; Max h.: 4.5

Hemispherical wall, ring base. Two concentric roulette patterns on the floor. Reddish-yellow core (5YR6/6), red slip (2.5YR5/6), hard fired.

9.8.2.3.1. Cypriot Terra Sigillata Lagynoi (Nos. 981–988)

In Jaffa, various lagynoi appeared. The first one with a double handle (no. 981) was recovered in the residential house in Area C and was part of the published assemblage dated by Kaplan from the mid-1st century BCE (Kaplan 1961:10, fig. 2:4). Similar lagynoi appeared in Machaerus (Loffreda 1996:107, fig. 48:28), Samaria (Crowfoot et al 1957:340, fig. 82:1), and at Hama (Papanicolaou 1971:186, fig. 70:30).

981 Lagynos

Reg. No. 79/C/61/445; Area C, Bucket 603(?)

Rim diam.: 6.5; Base diam.: 10.6; Max h.: 22

Slightly flared rim flattened on the top, cylindrical neck, oblique shoulder, rounded body, ring base, double barreled handle from the neck to the shoulder.

982 Lagynos

Reg. No. 79/A/73/136; Area A, Locus 752, Buckets 650 and 627

Base diam.: 7.5; Max h.: 14

Spheroid body, ring base, traces of vertical grooved handle from shoulder up. Reddish-yellow core (5YR7/6), red slip (2.5YR5/8), hard fired.

983 Lagynos

Reg. No. 79/A/73/137; Area A, Bucket 636

Rim diam.: 6; Base diam.: 4.9; Max h.: 15

Flat, shelf rim, cylindrical neck, rounded grooved shoulder, small disc base, high loop handle from below the rim to the shoulder. Red slip (2.5YR5/6), hard fired.

984 Lagynos

Reg. No. 79/C/61/401; Area C, Sq. DD101, Locus 429, Bucket 614

Rim diam.: 4.5; Max h.: 7

Inverted rim, narrow neck gradually widening toward the shoulder, loop handle from the neck to the shoulder. Weak red core (2.5YR5/4), dark red slip (2.5YR4/8), hard fired.

985 Lagynos

Reg. No. 79/C/61/433; Area C, Sq. CC101, Bucket 643

Rim diam.: 4.8; Base diam.: 3.4; Max h.: 7

Knobbed rim, sloping wall carinated at junction with lower body, flat base with a wide groove, one handle from rim to wall. Red slip on the upper part. Reddish-yellow ware (5YR7/6) and dark red slip (2.5YR4/8), hard fired.

986 Lagynos

Reg. No. 79/C/61/396; Area C, Sq. DD100, Bucket 267

Base diam.: 6; Max h.: 4

Heavy rounded wall, ring base. Feathering roulette pattern on the external face. Reddish-yellow ware (5YR7/6–6/6) and dark red slip (2.5YR4/8), hard fired.

987 Lagynos

Reg. No. 79/C/61/398; Area C, Sq. CC102, Bucket 411

Body fragment. Incised rope pattern on the external face. Red core (10R5/8) and red slip (10R4/6), a few small white grits, hard fired.

988 Lagynos

Reg. No. 79/C/61/397; Area C, Sq. DD100, Bucket 107

Body fragment. Sticks pattern on the external face. Red ware (2.5YR6/6) and red slip (2.5YR6/6) many small white grits, a few small black grits, hard fired.

9.8.2.4. Pontica Sigillata (No. 989)

A single example in Jaffa can be defined as Pontica plate (Hayes 1997:57, fig. 21:3).

989 Bowl

Reg. No. 79/C/65/557; Area C, Sq. CC102, Bucket 912

Rim diam.: 16; Max h.: 2.5

Slightly flared plain rim, concave wall sharply carinated at junction with wide floor. Reddish-brown core and slip (5YR5/4), a few minute white slips, hard fired.

9.8.3. Western Terra Sigillata

The finest of the Roman red slip tableware was produced in the workshop in Arezzo, in north central Italy, from 30 BC until 70 CE. At the same time other centers in Italy produced the same ware (Puteolia, Pisa, Modena). Only the potters' stamps distinguish the products of the various workshops (Stojanovic 1992:46).

The ware is light red to reddish-yellow. The slip is red with a tendency toward darker and brownish tones with a lustrous finish. The vessels were plain, often with appliqué decoration on wall, or in mould wheel technique.

The repertoire in Jaffa is rather dull and limited for unknown reasons. Most fragments are not familiar from the Hayes corpora and have no parallels in Israel. Plate no. 992 can be defined as *Type VI* dated to 1st century CE (Hayes 1985 381–2 Tav CXVII:1). Footed base no 993 is similar to *Type XXX* from Cap Dramont, dated to the 1st century CE (Hayes 1985:393, pl. CXXIX:1).

990 Bowl

Reg. No. 79/A/70/192; Area A, Sq. K3, Bucket 194

Rim diam.: 8; Base diam.: 4.5; Max h.: 4

Plain rim with pointed lip, carinated wall, ring base. Very pale brown core (10YR7/4) and dark red slip (2.5YR4/6), hard fired.

991 Krater

Reg. No. 79/Y/68/296; Area Y, Sq. X12, Locus L–1, Bucket 116

Rim diam.: 37.5; Max h.: 5

Broad flanged rim, wall concave below the rim. Red ware (2.5YR6/8), red slip on the rim (10R4/8), a few small white grits, hard fired.

992 Plate

Reg. No. A/70/B112.1; Area A, Sq. K3, Bucket 112

Rim diam.: 28; Max h.: 2.5

Flared rim. Reddish-yellow core (5YR7/6) and dark red slip (2.5YR4/8), hard fired.

993 Chalice

Reg. No. 79/Y/68/294; Area Y, Sq. X12, Locus L–1, Bucket 18

Base diam.: 9.8; Max h.: 9.8

Low trumpet base. Two concentric grooves on external edge and stamped letters(?) on the underside. Red core (2.5YR6/6) and red slip (10R5/8), hard fired.

994 Jug

Reg. No. 79/X/60/044; Sounding X, Bucket 5

Base diam.: 6.5; Max h.: 3.5

Steep wall, pseudo ring base. Light brown Internal ware (7.5YR6/4) and red slip (2.5YR5/8), hard fired.

9.9. Late Roman and Byzantine Imported Ware

9.9.1. Red Slip Ware

Red Slip Ware was the most popular fine ware during the Late Roman and Byzantine Period. This ware, which includes mainly bowls and plates, can be considered the immediate successor of the Terra Sigillata vessels. The bowls were made of various fine red fabrics and covered with red slip. A few centers of manufacture were identified over the eastern Mediterranean.

During the 19th and early 20th century the red slip and mainly the African red slip in museum collections, was considered to be of Egyptian or Samian origin. The first to identify its origin correctly was Waagé who observed that it was Antioch on the Orontes. Following in his footsteps, Lamboglia and Salomonson together with additional research during the 2nd half of the 20th century widened our understanding (Lamboglia 1958, 1963; Salomonson 1968, 1969). The most important research was carried out by Hayes in his book “Late Roman Pottery” (Hayes 1972) and the *Encyclopedia Italiana* typology (Hayes 1985). He divided the Red Slip into four regional fabrics, each made at another center or part of the Roman world. Each of them was influenced by the other and all are a development of the former Terra Sigillata and even the Attic black glazed ware:

1. African Red Slip (ARS) from north Africa-Tunisia
2. Phocaean Red Slip (LRC) from Asia Minor
3. Cypriot Red Slip (CRS) from Cyprus
4. Egyptian Red Slip (ERS) from Egypt

The Jaffa assemblage of red slip ware can be considered representative of the typical and characteristic of types in Israel. The classification employed here follows Hayes typology and the author’s PhD research on red slip ware in Israel (Hayes 1972; Tsuf 2003).

9.9.1.1. African Red Slip

This ware was produced in Tunisia from the 1st to the 7th century CE. The importation and dominance of this ware on the Mediterranean markets occurred especially in the Late Roman period. During that period Terra Sigillata declined and vanished though the North African industry had already gained enough popularity in the Roman world.

The fabric differs from the Terra Sigillata ware, but initially the shapes were clear copies of the former. The ware was fine and orange-red in color. The slip was thin and smooth, and only one tone darker than the ware’s color. The slip often covered just the internal wall and external rim.

A wide range of shapes are attested in Jaffa. Most of them can be dated to the late 3rd–7th century CE, even if we can find a few forms from the earlier 2nd–3rd centuries CE. The repertoire represented in Jaffa is not always characteristic of all of Israel. A few types can be considered unique to Jaffa. For example, the earliest Type 25 which was unknown from published excavations throughout Israel and seems quite rare, according the author’s investigation (no. 995).⁸¹ Hayes dated Type 25 to the 2nd century CE (Hayes 1972:49, fig. 8, form 25.1). In Israel the ARS appeared in small quantities not before the 2nd century with Hayes Type 3 and 8a which were produced from 80/90 until 160 CE and later (Tsuf 2003:100–101). During the 3rd century, the importation of ARS to Israel starts to increase. The following Types 31 are dated to the Severan

⁸¹ See Tsuf 2003 in addition to the recent publication of Caesarea pottery by Johnson 2008b:25–31, nos. 45–145; 54–57, nos. 558–608; 58–62, nos. 623–688.

period or slightly earlier (Hayes 1972:52–3, fig. 9:4) (no. 996–997) and Type 44 dated to the 220/240–late 3rd CE (Hayes 1972 61–62 fig. 10:2,10) (no. 998) appeared in Jaffa. Both types are missing in Israel repertoire. The next *Types 45B* (nos. 999–1001) and *Type 48B* (nos. 1002–1003) appeared apart from Jaffa, only in Caesarea and were dated from the mid-3rd to the mid-4th century CE (Hayes 1972:65–67, fig. 11:8–10; Tsuf 2003:111–112, 213–214, pl. 1:10–14). The most common type during the 4th century CE in Jaffa is Type 50 (Hayes 1972:69–73 fig.12)(nos. 1004–1010). That type appeared in large quantities in Jaffa and throughout Israel. In Jaffa, *Type 50A* appeared dated to the 3rd–4th century CE (1004–1005). Examples appeared in Caesarea, Nazareth, and Sumaqa (Tsuf 2003:113–114, 214 pl. 1:17–21). *Type 50B* is dated to the early 4th–5th century CE (1006–1010). Examples appeared in Caesarea, Shiqmona, Carmel, Jalame, and Oboda (Tsuf 2003:113–114, 214–6, pl.1:22–36).

Another common form of the 4th century CE in Jaffa is *Type 58A* (Hayes 1972:93–96, fig. 14:1,5,8)(1011–1015). Examples appeared mainly in the north region such as in Nazareth, Meiron, Jalame, Sumaqa, and Caesarea during the late 3rd century and until 400 CE (Tsuf 2003:115–6, pl. 3:43–53).

Type 59B (no. 1016) (Hayes 1972:96–100, fig. 15:19) and *Type 61A* (1017–1018) (Hayes 1972:100–107, fig. 16:13, 21) are popular as well. Their distribution pattern is rather large and includes northern sites as such as Jalame, Meiron, and Nazareth as well as Caesarea, Sumaqa, and Kastrā, and in the south Bethany, Oboda, and Rehovot in the Negev (Tsuf 2003:115–118, 220–223, pl. 3:43–53; pl. 4:67–84, pl. 5:87–96).

Type 64–65 (nos. 1019–1020) (Hayes 1972 109–110 fig. 18:2–3) are typical of the 4th–5th century but are missing from other contexts in Israel.

The most typical Byzantine types in Israel such as 67, 91, 99 and 104 are missing in Jaffa, except for a single rim fragment Type 67 dated to the 4th–6th century CE (1021). This is probably due to the lack of distinguished Byzantine excavated areas at the site. However, a few late types appeared such as Type 90B, which was dated to 550–600 CE (Hayes 1972:139–140, fig. 25:1) (1022–1023). A later variation was recovered at Shiqmona (Tsuf 2003:125, 229, pl. 7:150).

A single base that can be identified as Type 92 (no. 1024) (Hayes 1972:145, fig. 26:1) dated to the mid-5th century CE or earlier is missing in the assemblage in Israel. Type 107 (no. 1025) (Hayes 1972:171, fig. 33:1–2) is rather common in Israel. The type can be dated to the 6th century CE and appears at Afar, Caesarea, Kastrā, Ovesh, Capernaum, ‘En Boqeq, Rehovot in the Negev, and Sumaqa (Tsuf 2003:132, 243–4, fig. 13:272–284).

A few cooking dish fragments appeared in Jaffa (nos. 1027–1033). Type 23A (nos. 1027–1029) (Hayes 1972:45–48, fig. 7:1) is relatively common in Israel during the early to mid-2nd century CE. Type 23B appeared in Caesarea Area KK (author’s personal knowledge) and in the Caesarea harbour (Oleson 1994:36, and fig. 7:k6–k7). The next types are rare in the repertoire in Israel. Type 181 (nos. 1030–1031) (Hayes 1972:201, fig. 184) was defined as a derivative or copy of the “Pompeian Red Ware” cooking dish. The type flourished mainly at western sites and North Africa from the mid-2nd to the mid-3rd century CE. The only known parallel appeared in Caesarea Area CC (author’s personal knowledge) and in Benghazi (Kenrik 1985:375, and fig.70:673). Type 185 and Type 193 are missing in Israel (Hayes 1972:204, fig. 35:1; 207, fig. 36:1) (nos. 1032–1033). They were of local Tunisian undated workshops, probably earlier than the 2nd century CE.

995 Bowl

Reg. No. A/73/B137; Area A, Bucket 137

Rim diam.: 21.5; Max h.: 10

Broad, shelf rim turning slightly downward, low wall, broad base slightly concaved toward the center.

Red core (2.5YR6/6) and red slip (2.5YR6/8), hard fired.

996 Bowl

Reg. No. A/72/B50; Area A, Sq. L3, Bucket 50

Rim diam.: 40; Base diam.: 27.5; Max h.: 4

Plain rim, sloping wall. Red core (2.5YR5/8) and red slip (2.5YR5/8), many minute white grits, hard fired.

997 Bowl

Reg. No. C/61/B138; Area C, Sq. CC100, Bucket 138

Plain rim, sloping wall, broad flat base. Red ware and slip (2.5YR5/8), many minute white grits, hard fired.

998 Bowl

Reg. No. A/72/B430.2; Area A, Locus 752, Bucket 430

Rim diam.: 14; Max h.: 1.5

Broad arched rim, sloping wall. Red ware and slip (2.5YR5/8), hard fired.

999 Bowl

Reg. No. A/72/B149; Area A, Locus 752, Bucket 149

Rim diam.: 34; Max h.: 1.4

Flared rim. Red ware (2.5YR5/8), hard fired.

1000 Bowl

Reg. No. A/72/B431.1; Area A, Locus 752, Bucket 431

Rim diam.: 30; Max h.: 1.3

Flared rim. Red ware (2.5YR5/8), a few minute black grits, hard fired.

1001 Bowl

Reg. No. C/61/B81.4; Area C, Bucket 81

Rim diam.: 27.5; Max h.: 1

Broad, shelf rim turning slightly upward. Red core (2.5YR6/6) and red slip (2.5YR6/8), hard fired.

1002 Bowl

Reg. No. 79/A/72/149; Area A, Locus 752, Bucket 169, 430

Rim diam.: 34.5; Max h.: 1.8

Flared rim with inside groove, concave upper wall sharply carinated at junction with lower part. Red ware and slip (2.5YR5/8), hard fired.

1003 Bowl

Reg. No. A/72/B431.2; Area A, Locus 752, Bucket 431

Rim diam.: 35; Max h.: 2

Red ware (2.5YR6/6) and red slip (2.5YR6/8), hard fired.

1004 Bowl

Reg. No. 79/A/72/191; Area A, Locus 752, Bucket 663

Rim diam.: 39; Base diam.: 28.5; Max h.: 6

Plain rim, sloping wall, flat base concave on the underside. Red ware and slip (2.5YR5/8), hard fired.

1005 Bowl

Reg. No. 79/A/73/138; Area A, Bucket 590

Rim diam.: 35; Base diam.: 27.5; Max h.: 4.5

Plain rim, sloping wall, flat base concave on the underside. Red ware and slip (2.5YR5/8), hard fired.

1006 Bowl

Reg. No. 79/A/72/145; Area A, Locus 752, Bucket 601

Rim diam.: 32; Base diam.: 20; Max h.: 3.2

Plain rim, sloping wall, flat base concave on the underside. Red ware and slip (2.5YR5/8), hard fired.

1007 Bowl

Reg. No. 79/A/72/142; Area A, Locus 752, Buckets 652/663

Rim diam.: 29.5; Base diam.: 20; Max h.: 5

Plain rim, sloping wall, flat base concave on the underside. Red ware and slip (2.5YR5/8), hard fired.

1008 Bowl

Reg. No. 79/A/72/144; Area A, Locus 752, Buckets 652/663

Rim diam.: 23; Base diam.: 16; Max h.: 3.7

Plain rim, sloping wall, flat base concave on the underside. Red ware and slip (2.5YR5/8), hard fired.

1009 Bowl

Reg. No. 79/A/72/146; Area A, Locus 752, Buckets 633, 652,

Rim diam.: 22.5; Base diam.: 12.5; Max h.: 4.2

Plain rim, sloping wall, flat base concave on the underside. Red ware and slip (2.5YR5/8), hard fired.

1010 Bowl

Reg. No. 79/G/64/023; Area G, Sq. 29, Bucket 78

Rim diam.: 21.3; Base diam.: 14.5; Max h.: 3.7

Plain rim, sloping wall, flat base concave on the underside. Red ware and slip (2.5YR6/8), hard fired.

1011 Bowl

Reg. No. C/61/596; Area C, Bucket 95

Base diam.: 22; Max h.: 2.5

Flat floor, wide tiny ring base. Two concentric grooves on the floor. Red ware (2.5YR5/6) and red slip (2.5YR5/8), a few minute black grits, hard fired.

1012 Bowl

Reg. No. 79/A/72/151; Area A, Locus 753, Bucket 522

Rim diam.: 39.5; Base diam.: 30; Max h.: 5

Flanged double grooved rim, flat base concave on the underside. Red ware and slip (2.5YR5/8), hard fired.

1013 Bowl

Reg. No. 79/A/71/232; Area A, Sq. I1, Bucket 645

Rim diam.: 33; Max h.: 3

Flanged double grooved rim. Red ware and slip (2.5YR5/8), hard fired.

1014 Bowl

Reg. No. 79/A/72/190; Area A, Locus 753, Buckets 607 (and 522)

Rim diam.: 31.8; Base diam.: 21; Max h.: 3.5

Flanged rim, rounded wall, flat base concave on the underside. Red ware and slip (2.5YR5/8), hard fired.

1015 Bowl

Reg. No. 79/A/72/150; Area A, Bucket 4

Rim diam.: 31; Base diam.: 22; Max h.: 3.9

Flanged rim, rounded wall, flat base concave on the underside. Red ware and slip (2.5YR5/8), hard fired.

1016 Bowl

Reg. No. A/72/B522; Area A, Locus 753, Bucket 522

Rim diam.: 37.5; Max h.: 5

Flanged rim decorated with two incised grooves on top, rounded wall. Red core (2.5YR6/6) and light red slip (10R6/6), hard fired.

1017 Bowl

Reg. No. A/70/B20; Area A, Sq. L3, Bucket 20

Rim diam.: 36; Max h.: 3.2

Incurved rim with triangular section, rounded wall. Red ware and slip (2.5YR5/8), hard fired.

1018 Bowl

Reg. No. 79/G/64/024; Area G, Sq. 29, Bucket 67

Rim diam.: 22; Max h.: 3.3

Incurved rim with triangular section, rounded wall. Red ware (2.5YR6/6) and red slip (2.5YR5/8) many large black grits, hard fired.

1019 Bowl

Reg. No. A/73/B151,169; Area A, Buckets 151 and 169

Rim diam.: 21.5; Max h.: 2.5

Flared wall. Red core (2.5YR6/6) and dark red slip (2.5YR4/8), hard fired.

1020 Bowl

Reg. No. A/72/B430.3; Area A, Locus 752, Bucket 430

Rim diam.: 21; Max h.: 1.5

Flanged rim, rounded wall. Red core (2.5YR5/6) and red slip (2.5YR6/8), hard fired.

1021 Bowl

Reg. No. C/61/B59.1; Area C, Sq. DD100, Bucket 59

Rim diam.: 23.5; Max h.: 1.5

Stepped rim with thick down turned lip. Red core (2.5YR6/6) and red slip (2.5YR6/8), hard fired.

1022 Plate

Reg. No. 79/C/61/429; Area C, Sq. DD102, Bucket 22

Rim diam.: 24; Base diam.: 14; Max h.: 4.5

Flared knobbed rim, incised twice at junction with rounded wall, high and heavy ring base. Weak red core (5YR6/4) and red slip (2.5YR5/6), many small and large white grits, hard fired.

1023 Bowl

Reg. No. C/61/B27.2; Area C, Sq. DD101, Bucket 27

Rim diam.: 29; Max h.: 1.5

Flared and knobbed rim. Red ware (2.5YR6/8) and red slip (2.5YR6/6), hard fired.

1024 Bowl

Reg. No. 79/J/70/094; Area J, Bucket 21

Flat base. Concentric feathering roulette pattern on the floor. Very pale brown ware and slip (10YR7/3), a few small white grits, hard fired.

1025 Bowl

Reg. No. C/61/B46.1; Area C, Sq. DD101, Bucket 46

Rim diam.: 28.5; Max h.: 2.4

Wide and thick shelf rim slightly concaved on top, sloping wall. Weak red ware and slip (2.5YR6/6), hard fired.

1026 Bowl

Reg. No. 79/X/60/025; Sounding X, Bucket 3

Base fragment. Concentric grooves and free stamped rosettes pattern on the floor. Red ware and slip (2.5YR5/8), hard fired.

1027 Casserole

Reg. No. C/61/B54.1; Area C, Sq. CC101, Bucket 54

Rim diam.: 27.5; Max h.: 5

Thick and steep rim, sloping and slightly concaved wall on upper part. Red ware (2.5YR6/8) and dusky red external slip (2.5YR6/8), hard fired.

1028 Casserole

Reg. No. C/61/B125.3; Area C, Sq. DD100, Locus 414, Bucket 125

Lower part with broad rounded base, grooved on underside. Red ware (2.5YR6/8) and dusky red external slip (2.5YR6/8), hard fired.

1029 Casserole

Reg. No. A/73/B559; Area A, Bucket 559

Body fragment with grooved on underside. Red ware (2.5YR6/8) and dusky red external slip (2.5YR6/8), hard fired.

1030 Casserole

Reg. No. 79/A/72/141; Area A, Locus 752, Bucket 431

Rim diam.: 37.5; Base diam.: 30; Max h.: 5.8

Slightly incurved rim, rounded wall, flat base. Red ware and slip (2.5YR5/8), Black band outside below rim. Many small white and a few minute black grits. Hard fired.

1031 Casserole

Reg. No. C/61/B125.1; Area C, Sq. DD100, Locus 414, Bucket 125

Rim diam.: 30; Max h.: 4

Slightly incurved rim, rounded wall. Red ware and slip (2.5YR5/8), hard fired.

1032 Lid

Reg. No. A/70/B189.2; Area A, Sq. K3, Bucket 189

Rim diam.: 45; Max h.: 3.5

Flared, thickened rim, sloping wall. Brown ware and core (7.5YR5/4–4/4), many minute white grits and many small silver mica, medium fired.

1033 Bowl

Reg. No. C/61/B710.5; Area C, Sq. DD101, Locus 436, Bucket 710

Rim diam.: 9; Max h.: 6

Plain rim turning slightly inward, rounded wall. Reddish-yellow core (5YR6/6), dark red slip on external

and upper internal face (2.5YR4/8) and dusky red slip on lower internal face. Many minute white and black grits, hard fired.

9.9.1.2. Phoenician Red Slip

Originally known as Late Roman C ware. After the discovery of a major production center in Phocaea, in western Turkey, Hayes suggested calling it Phocaean red slip (Hayes 1980:9). LRC ware dominated and was widespread throughout the eastern Mediterranean during the 5th–7th century CE. Hayes has divided the ware into 10 shapes. The fabric is a red-light red color. The slip is dull, thin and in the same color as the ware.

In Israel, Types 3 and 10 were the most distributed forms (Tsuf 2003:100, graph 8). However, in Jaffa only Type 10 fragments were found (nos. 1034–1035) and a few stamped crosses on the bowl type floors (nos. 1036–1037). Type 10A (no. 1034) (Hayes 1972:343–346, fig. 71:1) as well as Type 10C (1035) (Hayes 1972:243–346, fig. 71:11–15) were widely spread in Israel during the 6th century CE and until the Islamic period. Large numbers of fragments appeared on the Coastal Plain at Afar, Caesarea, Kastra, Ovesh, Shiqmona, and Sumaqa, and in northern and southern Israel at Capernaum, Tel Keisan, Hammat Gader, Jerusalem, Bethany, and 'En Boqeq, (Tsuf 2003:276–8, 142–3, pl. 25:524–572).

1034 Bowl

Reg. No. C/61/597; Area C, Sq. DD100, Bucketd 113 (and 105)

Rim diam.: 22; Max h.: 4

Knobbed rim, sloping wall. Light red ware and slip (2.5YR7/6), dusky red slip on lip (2.5YR4/3), a few-minute black grits, hard fired.

1035 Bowl

Reg. No. C/61/B58.1; Area C, Sq. CC100, Bucket 58

Rim diam.: 19; Max h.: 2.5

Thick and broad rim raised slightly upward, rounded wall. Red core and slip (2.5YR5/8), many minute white grits, hard fired.

1036 Bowl

Reg. No. 79/A/56/227; Area A

Base fragment with very shallow cross stamped on the floor. Red ware and slip (2.5YR5/6), hard fired.

1037 Bowl

Reg. No. 79/A/71/233; Area A, Bucket 56

Base fragment with stamped figure of animal(?) on floor. Red core (2.5YR6/8), hard fired.

9.9.1.3. Cypriot Red Slip

This ware originated in Cyprus. It was very common on that island, even though no evidence about the center of production has yet been found. The fabric is red to brownish red in color. The slip varies from matte red to metallic red. This ware was very common, in addition to the Phocaean ware, during the 5th–7th century CE.

The most popular forms in Israel were Types 1, 2, 3, 7, and 9 (Tsuf 2003:101, graph 9). In Jaffa, all except for the most common type were represented even though usually in small quantities, likely due to the unsystematic excavations at the Late Roman and Byzantine levels. The earlier Type 1.1 (nos. 1038–1040) (Hayes 1972:372–3, fig. 80:1–4) appeared in small quantities in Jaffa. In Israel, the type appeared during the mid-4th until the 7th century CE at Caesarea, Kastra, Capernaum, Jalame, Jerusalem, Meiron, Rehovot in the Negev, Shema, and Sumaqa (Tsuf 2003:146–7, pl. 28:588–616). Type 3 (nos. 1041–1047) (Hayes 1972:376, fig. 80:2) was well represented. However, in Israel the type appeared in small quantities at many sites such as Caesarea, Afar, Kastra, Ovesh, Ramat Hanadiv, Capernaum, Hamat Gader, and Jalame during the 5th–7th century CE (Tsuf 2003:148, pl. 31:660–671; 32:672–687). Type 7 (no. 1048) (Hayes 1972:377–378, fig. 81:7) is rare in Jaffa's assemblage. However, it was well known in Israel and appeared during the Byzantine period at Caesarea, Kastra, Shiqmona, Ramat Hanadiv, Afar, Sumaqa, Capernaum, Jalame, Tel Keisan, Meiron, Nazareth, and Ovesh (Tsuf 2003:149–150, fig. 34–35:699–758). Type 8 (no. 1049) (Hayes 1972:379; 1980:529) was not common in Jaffa. Examples appeared mainly at Coastal Plain sites in Kastra,

Caesarea, Ramat Hanadiv, Ovesh, and Oboda, from the 4th to the mid-6th century CE (Tsuf 2003:150–1, pl. 38:759–771).

Types 9 to 10 are small and large variations of a single shaped bowl with hooked rim (nos. 1050–1058). Both are well represented at sites in Israel. Type 9A (no. 1050) and Type 9B (1051–1054) (Hayes 1972:379–382, fig. 81:1–9 and fig 82:10–12) were the second most common red slip type in Israel. Examples appear at Afar, Caesarea, Kastra, Ovesh, Ramat Hanadiv, Jalame, Jerusalem, Nazareth, Rehovot in the Negev, Oboda, ‘En Boqeq, Hammat Gader, Keisan, Shema, and Sumaqa during the late 3rd/early 4th century and until the 6th century CE (Tsuf 2003:151, 306–9 pl. 36:772–778; 37:779–822). Type 10 (nos. 1055–1056) (Hayes 1972:382–3, fig. 82:1) is less common. Examples appeared in Caesarea, Kastra, Ovesh, Shiqmona, and Capernaum during the 5th–7th century CE (Tsuf 2003:152–3, pl. 40:838–847). Type 11 (no. 1057) (Hayes 1972:383, fig. 40:1–2) is represented by a single rim in Jaffa. Examples appeared in Caesarea, Kastra, Ovesh, Ramat Hanadiv, Shiqmona, Tel Keisan, and Sumaqa dated to the early 5th–7th century CE (Tsuf 2003:153–4, 315–317, fig. 40:848–869).

A few fragments in Jaffa were not classified by the Hayes typology. A single one was identified as a Rodziewicz Type 3b (1058) according to the Alexandria repertoire (Rodziewicz 1976:46, pl. 10:D3b). The Jaffa example displays unique stamped diamonds on the rim, which is unknown in the repertoire in Israel. The type appeared in Israel in Caesarea, Shiqmona, Ramat Hanadiv, ‘En Boqeq during the 5th–7th century CE (Tsuf 2003:319, 154–5, pl. 41:881–886).

Two fragments of bowls with a stamped floor were found in Jaffa with a stamped cross at the center of each, which is typical of the Type 9 bowls (nos. 1061–1062). The third had a concentric palm tree pattern (no. 1060).

1038 Bowl

Reg. No. 79/X/60/027; Sounding X, Bucket 7

Rim diam.: 24; Base diam.: 13; Max h.: 4

Thickened rim, rounded wall, grooved ring base. Yellowish-red core (5YR5/6), hard fired.

1039 Bowl

Reg. No. C/61/B80.2; Area C, Bucket 80

Rim diam.: 25; Max h.: 9

Thickened rim, rounded wall. Red core (2.5YR6/6) and red slip (2.5YR5/6), hard fired.

1040 Bowl

Reg. No. C/61/B59.2; Area C, Sq. DD100, Bucket 59

Rim diam.: 28.5; Max h.: 3.5

Thickened rim, rounded wall. Red core (2.5YR6/6) and red slip (2.5YR5/6), many minute black grits, hard fired.

1041 Bowl

Reg. No. 79/J/70/091; Area J, Bucket 1

Rim diam.: 17; Base diam.: 7; Max h.: 4.5

Flared, knobbed rim grooved outside, rounded wall, low ring base. Roulette pattern on the external face. Weak red core (10R5/4) and slip (10R5/4), many small white grits, hard fired.

1042 Bowl

Reg. No. 79/J/70/092; Area J, Locus 1, Bucket 16

Rim diam.: 16.5; Base diam.: 7.5; Max h.: 4.5

Flared, knobbed rim, rounded wall, low ring base. Roulette pattern on external face. Red core (2.5YR5/8) and dark red slip (2.5YR4/6), hard fired.

1043 Bowl

Reg. No. 79/J/70/093; Area J, Bucket 76

Rim diam.: 15.5; Base diam.: 7; Max h.: 4.3

Flared, knobbed rim grooved outside, rounded wall, low ring base. Roulette pattern on external face. Red core (2.5YR5/6) and dark red slip (2.5YR4/8), a few small white grits, hard fired.

1044 Bowl

Reg. No. C/61/B81.5; Area C, Bucket 81

Flared knobbed rim, rounded wall. Light reddish-brown core (5YR6/4) and reddish-yellow slip (5YR5/4), dark gray slip on rim (5YR4/1), hard fired.

1045 Bowl

Reg. No. 79/J/70/090; Area J, Bucket 6

Rim diam.: 22.5; Max h.: 4.3

Flared, knobbed rim, sloping wall. Roulette pattern on the external face. Light brown core (7.5YR6/4) and dark red slip (2.5YR4/6), hard fired.

1046 Bowl

Reg. No. 79/A/56/219; Area A

Rim diam.: 22.5; Max h.: 3.4

Flared, knobbed rim, sloping wall. Roulette pattern on external face and potter stamp of wavy short line on the rim exterior. Reddish-brown core and slip (5YR5/4), hard fired.

1047 Bowl

Reg. No. C/61/B53.1; Area C, Sq. CC101, Bucket 53

Rim diam.: 20; Max h.: 2.5

Flared, knobbed rim, sloping wall. Red core (2.5YR6/6) and red slip (2.5YR5/6), a few minute black grits, hard fired.

1048 Bowl

Reg. No. C/61/B50.2; Area C, Sq. CC100, Bucket 50

Rim diam.: 42.5; Max h.: 3.5

Thick rim, flattened and grooved on top, steep wall. Wavy incised line on rim external face. wavy plastic decoration below rim. Weak red core (2.5YR6/4) and slip (2.5YR5/3), many minute white grits, hard fired.

1049 Bowl

Reg. No. 79/A/56/175; Area A

Rim diam.: 25; Max h.: 3

Overhanging rim, slightly concave on top rim, rounded walls. Reddish-yellow ware (5YR6/6), few minute black grits, hard fired.

1050 Bowl

Reg. No. C/65/B844.1; Area C, Sq. CC103, Bucket 844

Rim diam.: 28.5; Max h.: 4.6

Flared, knobbed rim, sloping wall. Yellowish-red core (5YR5/6), hard fired.

1051 Bowl

Reg. No. 79/A/56/218; Area A, Sq. E.7

Rim diam.: 22; Max h.: 3.5

Incurved, thickened rim. Potter stamp of grooved wavy line on the rim exterior. Pink ware (5YR7/4) and yellowish-red core (5YR5/6), a few minute black grits, hard fired.

1052 Bowl

Reg. No. C/61/B30.1; Area C, Sq. DD101, Bucket 30

Rim diam.: 23.5; Max h.: 2.5

Incurved, thickened rim. Weak red core (2.5YR6/4) and slip (2.5YR5/3), many minute white grits, hard fired.

1053 Bowl

Reg. No. C/61/B43.2; Area C, Sq. DD101, Bucket 43

Rim diam.: 20; Max h.: 3.5

Incurved, thickened rim, rounded wall. Weak red core (2.5YR5/3) and dusky red slip (2.5YR4/4), many minute white grits, hard fired.

1054 Bowl

Reg. No. A/70/B21.2; Area A, Sq. J3, Bucket 21

Rim diam.: 36; Max h.: 3

Incurved, thickened rim. Red core (2.5YR5/6), hard fired.

1055 Bowl

Reg. No. 79/A/56/217; Area A

Rim diam.: 38; Max h.: 3.5

Incurved, rim flanged at outer face and grooved on the top, ridge below the rim. Potter stamp of grooved wavy line on the rim exterior. Weak red ware (2.5YR6/4) and red slip (2.5YR5/6), hard fired.

1056 Bowl

Reg. No. 79/J/70/089; Area J, Bucket 4

Rim diam.: 37.5; Max h.: 4

Incurved rim, flanged at outer face and grooved on the top, ridge below the rim. Roulette pattern on the wall exterior and potter stamp of grooved wavy line on the rim exterior. Red core (5YR6/8) and yellowish-red slip (5YR5/6), a few small white grits, hard fired.

1057 Bowl

Reg. No. C/61/B30.2; Area C, Sq. DD101, Bucket 30

Rim diam.: 31; Max h.: 2

Flattened rim, sloping wall. Red core (2.5YR5/6) and dark red slip (2.5YR4/6), many small white grits, hard fired.

1058 Bowl

Reg. No. 79/G/64/047; Area G, Sq. 25, Bucket 89

Rim diam.: 24.5; Max h.: 2.4

Broad, flanged rim slightly turned downward, sloping wall. Diamond pattern on top of the rim. Red core (2.5YR5/6) and dark red slip (2.5YR4/8), many small white and black grits, hard fired.

1059 Vessel

Reg. No. A/71/B69; Area A, Sq. H4, Locus 600, Bucket 69

Rim diam.: 23; Max h.: 3

Fragment of rim or base decorated with roulette pattern on edge. Red ware (2.5YR6/8) and dark red slip (2.5YR4/8), many minute white and black grits, hard fired.

1060 Bowl

Reg. No. 79/C/61/564; Area C, Sq. DD102, Bucket 297

Body fragment with stamped pattern of palm tree on center of the floor. Red core (2.5YR6/6) and red slip (2.5YR5/8), few minute black grits, hard fired.

1061 Bowl

Reg. No. 79/B/60/025; Area B

Body fragment with stamped pattern of cross on the floor. Light reddish-brown core (5YR6/4) and weak red slip (2.5YR5/4), hard fired.

1062 Bowl

Reg. No. 79/X/60/026; Sounding X, Bucket 7

Body fragment with stamped cross pattern. Red core (2.5YR6/6) and red slip (2.5YR5/6), hard fired.

9.9.1.4. Egyptian Red Slip

These fabrics were a common imitation of ARS ware. Their distribution focused on Israel and Jordan, from the 5th to the early 8th centuries CE. This situation reflects the fact that the ARS ware was not common in Egypt until that period. Winlock and Crum were the first to identify the ware as of Egyptian origin following their excavations at the Monastery of Epiphanius near Luxor. The morphological similarity to the Terra Sigillata ware immediately raises the assumption, proven correct, that it is a local imitation of the Gallic and Britain Samian ware (Western Terra Sigillata) (Winlock and Crum 1926:85). Hayes was the first to identify and classify the Egyptian red slip into three subtypes according to three centers of manufacture (Hayes 1972:387–401):

1. Egyptian Red Slip A (ERS A)
2. Egyptian Red Slip B (ERS B)
3. Egyptian Red Slip C (ERS C)

Hayes classification still can be considered current even though new types were recovered recently in Egypt and call for a new classification.

The Jaffa typology is based upon new typology, which brings to light types unrecognized by Hayes that were recovered from recent excavations at Egypt (Tsuf 2003:160–171, nos.963–1035).

The fullest and up-to-date studies are Rodziewicz (Alexandria 1976) and Egloff (Kellia 1977). However, both classifications still can be attributed to Hayes' three regional subtypes.

9.9.1.4.1. Egyptian Red Slip A

The fabric is characterized by pale ware, pinkish in color. The slip was matte, slightly darker, and generally covering the internal wall and external rim. Hayes dated the ware to the late 4th–7th century CE (Hayes 1972:387–97). He attributed the ware to the Aswan region with limited appearance outside Egypt borders (Hayes 1980:53). The A ware was common in Alexandria (Group O and W) as well as in Kellia (Group 1). Recent excavation uncovered their manufacture center in Elephantine near Aswan that already existed in 16 BCE and reached peak production during the Late Byzantine and Early Umayyad period (Rodziewicz 1992:103–5; Tsuf 2003:29).

Its distribution spread throughout Israel, but each site is represented by a small number of sherds and just a few shapes, even though at Egyptian sites the ware appears in large quantities (Alexandria, El Ashemunian, Kellia).

In Jaffa, a few examples appeared, most of them known from Late Byzantine contexts in Israel and continued to be in use in the Early Islamic period. The earliest type (no. 1063) was classified by Hayes as Type A, dated according to the Monastery of Epiphanius around 500 CE (Hayes 1972:389, fig. 86:A).

Rodziewicz Type 36 was the most common Egyptian Red Slip A type in Israel, even though it was unrecognized by the Hayes typology (Rodziewicz 1976:59, pl. 27–28). In Jaffa, rim fragments were found of Type 36A (no. 1064) and Type 36f (no. 1065). The types appeared in Kastra, Hammat Gader, and Rehovot in the Negev, dated to the 6th–8th centuries CE (Tsuf 2003:164, pl. 46–47:980–986). *Rodziewicz Type 40* is like the former Type 36 dated to the Late Byzantine period and was most common in the eastern Mediterranean repertoire (Rodziewicz 1976, pl. 29:40; 1984, pl 22:10–7). It was known in Upper Egypt and Nubia (Hayes 1972:388, fig. 86:j), Kellia (Egloff 1977:80–81, pl. 39:12; 40:1–2), and Benghazi (Kenrick 1985:402, fig. 75:718.1). In Jaffa, rim fragments of Type 40A and 40D appeared (nos. 1066–1067). More examples were found at Coastal Plain sites such as Kastra and Caesarea in large quantities, dated to the 6th century CE (Tsuf 2003:164, pl. 47:987–996). *Egloff Type 63* is dated as well to the Byzantine period (Egloff 1977:83, pl. 40:15) (1068). It also appeared, although less frequently, in Oboda and Caesarea (Tsuf 2003:165, pl. 47:1000–1001). Two more fragments (nos. 1069–1070) are still unclassified even though the fabric is probably of the Egyptian Red Slip A type.

1063 Bowl

Reg. No. 79/A/70/191; Area A, Sq. L4, Bucket 244

Rim diam.: 22; Max h.: 6.5

Slightly flared rim with an outside ridge, vertical upper wall carinated at junction with lower part with an outside ridge. Pale red core (2.5YR7/4), dark red external slip (2.5YR4/8) and red internal slip (2.5YR6/6). A few small white grits and many small black grits, medium fired.

1064 Bowl

Reg. No. C/61/B80.3; Area C, Sq. DD100, Bucket 80

Rim diam.: 22.5; Max h.: 7.5

Triangular rim with external ledge, rounded wall. Pink ware (5YR7/4) and red slip (2.5YR6/6), many small black grits, hard fired.

1065 Bowl

Reg. No. C/65/B842.2; Area C, Bucket 842

Rim diam.: 22.5; Max h.: 3.5

Vertical rim with triangular section and grooved inside, sloping wall. Light brown core (7.5YR6/4) and reddish-yellow slip(5YR6/6), dark reddish-gray slip on rim (5YR4/2), many small gray grits, hard fired.

1066 Bowl

Reg. No. A/70/B21.1; Area A, Sq. J3, Bucket 21

Rim diam.: 10; Max h.: 4

Flared knobbed rim grooved outside, sloping wall. Reddish-yellow core (5YR7/6), reddish yellow slip (7.5YR6/6), dusky red slip on rim (2.5YR3/6), many minute black grits, a few medium red grits, hard fired.

1067 Bowl

Reg. No. C/61/B42; Area C, Sq. DD101, Bucket 42

Rim diam.: 22.5; Max h.: 3

Red core (2.5YR6/6), many minute black grits, medium fired.

1068 Plate

Reg. No. C/61/595; Area C, Sq. DD102, Bucket 22

Rim diam.: 38; Max h.: 2.5

Flared thickened rim grooved outside, sloping wall. Light reddish-brown core (5YR6/4) and reddish-yellow wash (5YR6/6), a few small and large white grits, a few small gold mica, medium fired.

1069 Bowl

Reg. No. C/61/B29; Area C, Locus 401, Bucket 29

Rim diam.: 30; Max h.: 2.5

Pale red core (2.5YR7/4) and red slip (2.5YR5/8), many minute black grits, a few small gold mica, medium fired.

1070 Bowl

Reg. No. C/65/644; Area C, Sq. DD103, Bucket 855

Base diam.: 12.5; Max h.: 2.1

Ring base. Weak red core (2.5YT6/4) and red slip (2.5YR5/8), many small gold mica, hard fired.

9.9.1.4.2. Egyptian Red Slip C (Nos. 1071–1073)

The fabric is loose, orange to brown in color. The ware tends to have an abraded appearance. The slip is thick, burnished, with a soapy dark red appearance. It is slightly micaceous, smooth and lustrous on the internal wall and rim and dull on the external wall. The core used to have air holes.

The C ware is common in Egypt and the Levant mainly during the 6th–7th centuries CE. In the Antioch report the ware was identified as ARS imitation, an imitation of Late Roman B (Waagé 1948:47, pl. VII:801–802). Hayes noted their resemblance to the al-Mina assemblage and identified the ware as being from the desert fringe in Egypt, the coast of Israel or Cyprus (Hayes 1972:399). That ware is missing from Alexandria, and in Kellia it most resembles Group 3 which was described as an imitation of Cypriot ware (Egloff 1978:79). In Israel, it is still rare but occurs in large quantities in Kh. Kerak. The ware was identified, probably according to morphological similarities, as Late Roman ware (Delougas and Haines 1960:32). This ware was the latest of the three classes, and can be dated from the mid-6th early 8th century CE.

In Jaffa, all three Hayes types occurred, dated from the Late Byzantine to the Early Islamic period.

The first is *Hayes Type a*, imitating ARS 105 (no. 1071). The type is rather common in Israel and appeared at Alahan in Sicily (Hayes 1972:400, fig. 89:a), al-Mina in Egypt (Hayes 1972:400, n. 4), and Antioch in Syria (Waagé 1948, no. 802u–x). In Israel the type appeared during the 7th century CE at quite a few sites: Caesarea, Jerusalem, ‘En Boqeq, and Oboda (Tsuf 2003:169, pl. 48:1022–1025). At ‘En Boqeq they are very common (16 bowl fragments were recovered) (Gihon 1993:197–8).

The second *Hayes Type b*, imitates the ARS type 104 (no 1072). A similar bowl was found in the National Museum in Cyprus dated to the 2nd half of the 7th century CE (Hayes 1972:400, fig. 89:b). Egloff identified a similar roulette bowl as a Cypriot imitation which can be classified as Egyptian Ware Group 3, dated to the 2nd half of the 7th century CE (Egloff 1978:85, pl. 42:2). In Caesarea, the type is quite common as well as in ‘En Boqeq (five bowls appeared at each site) (Tsuf 2003:170, pl. 48:1026–1030; Adan-Bayewitz 1986:113, fig. 5:18). At Kh. Kerak a group of bowls was dated to the 2nd half of the 7th century CE (Delougas and Haines 1960, pl. 53:3–20).

The third *Hayes Type c* is a clear imitation of CRS 9 (Hayes 1972:400, fig. 89:c) (1073). Similar bowls were recovered in Pella, where the type was described as of local manufacture (Smith and Day 1989:104, pl. 45:43). In Israel, the type was rather uncommon and appeared during the 6th–7th centuries CE in Caesarea and at Oboda (Tsuf 2003:170, pl.49:1032). A single bowl appeared in Kh. Kerak (Delougas and Haines 1960, pl. 53:2) and another in Beth-Shean (Johnson 2006:544, fig. 15.9:187).

1071 Bowl

Reg. No. 79/C/61/430; Area C, Sq. DD101 Locus:429, Bucket 708

Rim diam.: 16; Base diam.: 6; Max h.: 3.5

Infolded rim, sloping wall, ring base. Dark gray core (10YR4/1) and dusky red slip (2.5YR4/4), many small white and black grits, medium fired.

1072 Bowl

Reg. No. 79/C/65/579; Area C, Sqs. DD–103, Bucket 855

Rim diam.: 26; Base diam.: 14; Max h.: 6.5

Thickened rim, rounded wall, high ring base. Three rows of roulette pattern on the external face. Weak red core (2.5YR6/4) and red slip (2.5YR6/6), many small white and black grits, hard fired.

1073 Bowl

Reg. No. A/70/B211.4; Area A, Sq. K4, Bucket 211

Rim diam.: 25; Max h.: 3.5

Flanged rim grooved inside, sloping wall. Light brown core (7.5YR6/4) and dusky red slip (2.5YR4/4), many minute black grits, soft fired.

9.9.1.5. Sagallassos Red Slip

This fabric was first discovered in Sagallassos in southwest Turkey (Poblome 1999 179, 246 fig. 84:11, 22). This ware is rarely reported in Israel for published sites due to the fact that it was uncommon in Israel and unfamiliar to the researchers. A few examples were found recently in Ashkelon (Johnson 2008a:33, no.105).

1074 Plate

Reg. No. 79/A/73/168; Area A, Locus 752, Bucket 406

Rim diam.: 34.5; Max h.: 1.5

Projecting rim overhanging. Red core (2.5YR6/6) and dusky red slip (2.5YR3/4), hard fired.

1075 Bowl

Reg. No. A/73/B559.1; Area A, Locus 752, Bucket 559

Rim diam.: 37; Max h.: 2.5

Projecting rim overhanging. Red core (2.5YR6/6) and dusky red slip (2.5YR3/4), hard fired.

1076 Bowl

Reg. No. A/72/B649; Area A, Locus 752, Bucket 649

Rim diam.: 38.5; Max h.: 2.5

Projecting rim. Red core (2.5YR6/6) and dusky red slip (2.5YR3/4), hard fired.

9.10. Lamps

9.10.1. Persian Lamps

Open Saucer Lamps

The earlier vessel was clearly intended for use as an oil lamp, and appears toward the end of the 3rd millennium. This is a shallow wheel-made bowl with burning traces at the rim edges, and is usually pinched on one side to form a channel in which the wick might rest. The open lamp continued to appear from the Middle Bronze Age to the Hellenistic period with very small changes.

Stern suggested the Phoenician tradition or Cyprus as the source of origin according to evidence from al-Mina and the Phoenician cemetery in 'Atlit (Stern 1982:131; 1973:109; Woolley 1938).

Pinched Lamps

The Persian open lamp can be considered, besides the Persian mortarium, the hallmark of the Persian period. The Persian form is the later development of the Early Bronze Age prototype. The lamp tends to get smaller than the former Iron II type and the disc base changed to a flattened bottom. Although the type characterized the Persian period it continued to appear until the Early Hellenistic period.

In Jaffa, a large repertoire of lamps was found, especially in areas A and Y. They are rather large in size with a knife-shaved surface and sometimes with a light slip. Those features are typical of the Coastal Plain open lamps (Stern 1982:127–9, figs. 202–203).

The Jaffa assemblage also displays the development from a larger to a smaller size and can be divided into two subtypes.

A. Large Size Burnished Type (Nos. 1077–1084)

The flat base with a knife-shaved surface at the bottom and the rim very wide and ridged at junction with a relatively deep reservoir. The fabric is heavy and coarse (max. diam. 18 cm).

Date range: mid-6th – 5th cents. BCE

1077 Open lamp

Reg. No. 79/A/71/130; Area A, Sqs. H4–I4, Bucket 643

L.: 17; Max w.: 14.4; Max h.: 2.5

Pinched rim, flat base. Traces of burning on the rim. Knife paring on the underside.

Pink ware (7.5YR7/4) and light brown core (7.5YR6/4), many minute black and red grits, hard fired.

1078 Open lamp

Reg. No. 79/A/71/131; Area A, Sq. J2, Bucket 391

Max h.: 3.5

Pinched rim, flat base. Pink ware (7.5YR7/4) and light brown core (7.5YR6/4), many minute white and black grits, hard fired.

1079 Open lamp

Reg. No. A/70/B267; Area A, Sq. I3, Locus 608, Bucket 267

Max w.: 14; Max h.: 3.4

Pinched rim, flat base. Very pale brown ware (10YR7/3), many minute black grits, a few minute red grits, hard fired.

1080 Open lamp

Reg. No. 79/Y/64/095; Area Y, Sq. 3, Locus 605, Bucket 35

Max w.: 18.8; Max h.: 4

Pinched rim, flat base. Traces of burning on the rim, base and nozzle; traces of knife shaving on the base.

Very pale brown ware (10YR7/3) and pale brown core (10YR6/3), many minute black grits, hard fired.

1081 Open lamp

Reg. No. 79/Y/62/025; Area Y, Bucket 12

Max h.: 3.8

Pinched rim, flat base. Very pale brown ware (10YR7/3) and reddish-yellow core (5YR6/6), many minute black grits, hard fired.

1082 Open lamp

Reg. No. 79/C/71/047; Area C, Bucket 2

Max h.: 2

Pinched rim, flat base. Light reddish-brown ware (7.5YR6/4), many small black grits, hard fired.

1083 Open lamp

Reg. No. 79/C/65/508; Area C, Bucket 818

Pinched rim, flat base. Light reddish-brown ware (7.5YR6/4), many small white grits, hard fired.

1084 Open lamp

Reg. No. 79/H/64/015; Area H, Sq. 1, Locus 401, Bucket 27

Max h.: 1.2

Pinched rim, flat base. Trace of knife paring on the base. Pink ware (7.5YR7/3), hard fired.

B. Small Size Type (nos 1085–1088)

The base is more rounded and hollow. The fabric is thinner and lighter (max. diam. 13 cm).

At Tell el-Ful, the developments from the large sized mid-6th century shape toward the smaller sized 2nd century BCE type can be seen clearly (Lapp 1978:98–9, fig. 70:3–4,8–13; 71:14). At Tel Michal, two subtypes were recovered from all the Persian strata. While the larger examples appear at Stratum XI–VIII (529–400 BCE) the smaller were common in Stratum VII (400–350 BCE) (Singer-Avitz 1989:130, fig 9.1:8; 9.7:6; 9.8:12; 9.9:3). The later smaller subtype continued to be in use at Tel Michal at the Hellenistic stratum in Area H (Fischer 1999:232, fig.5.8:8). At Sukas, the typical Persian lamps appeared until the Late Hellenistic period. The large examples are dated to the early Persian level while the small ones are Late Hellenistic (Buhl 1983:63–4, fig.XVIII:341, 346, 349). The open lamps appeared throughout the Persian levels in Israel in large numbers. At Gezer, the open lamps as a whole were typical of the 5th–4th centuries BCE while at the Early Hellenistic level the folded lamps appeared (Gitin 1990:237, pl. 31:24, 35:25). At Dor and Mevorakh they appeared throughout the entire Persian period (Stern 1995:67, fig. 2.14; Rosenthal 1978:39, fig. 10:1–5).

Date range: 4th–2nd cents. BCE

1085 Open lamp

Reg. No. 79/Y/68/314; Area Y, Sq. X12, Locus L–1, Bucket 227

Max w.: 13; Max h.: 3.2

Pinched rim, flat base. Traces of knife shaving and fingers on the base. Pink ware (7.5YR7/4) and reddish-yellow core (5YR56/6), many minute black grits, hard fired.

1086 Open lamp

Reg. No. 79/A/71/135; Area A, Bucket 73

Max h.: 3.5

Pinched rim, flat base. Traces of burning on the rim. Pink ware (5YR7/4), many minute black grits, hard fired.

1087 Open lamp

Reg. No. 79/A/56/028; Area A, Sq. I8

Max w.: 11.2; Max h.: 3.2

Pinched rim, flat base. Traces of burning around the wick-hole. Reddish-yellow ware (5YR6/6), many minute black grits, hard fired.

1088 Open lamp

Reg. No. 79/Y/68/315; Area Y, Sq. Y14, Locus L–11, Bucket 158

Max h.: 4

Pinched rim, flat base. Reddish-yellow ware (5YR6/6), many minute black grits, hard fired.

9.10.2. Hellenistic Local Lamps

Folded Lamps (Nos. 1089–1091)

Wheel-made small bowl folded on two sides and pinched together. The fabric is of a buff reddish color, generally unslipped.

The type can be considered a survival of the traditional saucer pinched lamps. They represent the final modification before the bowl-lamp went out of use, and was taken over by the Hellenistic molded closed lamps and their imitations.

The size of the bowl decreases and the sides are completely overlapped, allowing a small opening at the back to receive the oil and a smaller opening at the front to take the wick.

In Jaffa, they appeared in relatively small numbers in comparison with the molded, closed lamp.

In Israel, the type flourished during the 2nd–1st century BCE. They appeared mainly in the Judean region and in Judean influenced areas, and were manufactured in those areas according to the NAA analysis on Masada lamps (Barag and Hershkovitz 1994:11–13). In Jerusalem, they continued to be in use until the latest pre-70 CE deposits and disappeared probably in the time of Herod the Great (Tushingham 1985:40, 43 fig. 19:41–42; 22:6–7; 24:8–9; Rosenthal-Heginbottom 2003:218). In several tombs in Jerusalem's vicinity, for example Jason's Tomb and the cave on Mount Scopus caves, the type appeared until the Herodian period. Sometimes they appeared together with local Hellenistic lamps (Delphiniform), and at Beth-Shemesh, Tell en-Nasbeh, and the Tyropoeon Valley with no other lamp types (Rahmani 1967:77, fig.9:1–3). The type does not seem common at Coastal Plain sites where during that period the close lamps and their derivations were commonly used.

Date range: 2nd–1st cents. BCE

1089 Open lamp

Reg. No. 79/A/73/084; Area A, Bucket 150

Base diam.: 3.4; Max h.: 3.3

Folded rim, flat base. Light reddish-brown ware (5YR6/4), many minute white and black grits, medium fired.

1090 Open lamp

Reg. No. 79/Y/64/126; Area Y, Sq. 1, Locus 600, Bucket 16

L.:9.2; Max w.:5.4; Max h.: 3

Folded rim, slightly rounded base. Traces of burning on the nozzle. Light reddish-brown ware (5YR6/4), many minute white and black grits, medium fired.

1091 Open lamp

Reg. No. 79/A/55/106; Area A, Locus A2

Max w.: 3.3; Max h.: 2.6

Folded rim, rounded base. Light reddish-brown ware (5YR6/4), many minute white and black grits, medium fired.

9.10.3. Hellenistic Imported Lamps

Attic Molded Lamps

The Broneer classification according to the Corinth repertoire and the Howland classification according to the Athenian Agora repertoire were used in the studies of Jaffa imported lamps (Broneer 1930; Howland 1958).

Howland 23C (Nos. 1092–1094)

Broad rim, sloping toward the center, vertical sides, usually with a groove at the outer edge of the rim, long and deep nozzle and small wick hole. U-shaped band handle. The lamp is broad and shallow with a thick wall which makes for very heavy stable and unbroken lamps. The lustrous glaze with a metallic shine covers the entire lamp except the bottom. The Jaffa lamps lack handles.

This type of lamp was classified in Corinth as the Broneer Type VI and in the Athenian Agora as the Howland type 23C. It was the most common Greek lamp in the 5th century. In Corinth the type reach its peak by the middle of the century “when the Corinthian potters stopped to compete with the Athenian craftsman, who supplied the local market with cheap lamps” (Broneer 1930:44). In the Athenian Agora the type was dated from the 3rd quarter of the 5th century to the 1st quarter of the 4th century BCE (Howland 1958:56–58).

In Israel, the type is rather rare except in Jaffa, and it appears at Dor in small quantities (Rosenthal-Heginbottom 1995:234).

Date range: 5th –early 4th cent. BCE

1092 Closed lamp

Reg. No. 79/A/72/100; Area A, Bucket 207

L.: 10.2; Max w.: 7; Base diam.: 4.8; Max h.: 3.2

Broad rim, sloping toward the center, vertical sides, long and deep nozzle with small wick hole, concave base, broken U-shaped band handle. Metallic black-gray burnish with golden shine. Reddish-yellow core (5YR7/6), hard fired.

1093 Closed lamp

Reg. No. 79/A/72/099; Area A, Bucket 270

L.: 9.7; Max w.: 6.6; Base diam.: 4.4; Max h.: 3

Broad rim, sloping toward the center, vertical sides, long and deep nozzle with small wick hole, concave base, broken U-shaped band handle. Reddish-yellow core (5YR6/7), hard fired.

1094 Closed lamp

Reg. No. A/72/B318.2; Area A, Sq. L3, Bucket 318

L.: 5.5; Max h.: 3.2

Broad rim, vertical sides. Brown ware (10YR5/3) and black glaze, hard fired.

Howland 24C/25A (Nos. 1095–1101)

The typical feature is the heavy raised slightly concave base with internal convex hump. The sides are high and curved and grooved at junction with the inward turning rim. Long, flattened at top nozzle. U-shaped band handle. The Attic fabric is of a fine red color with good black glaze covering the entire lamp.

In Jaffa, a few examples were found which display the development of the type from a high body (nos. 1095–1098) toward a more squatted body (nos. 1099–1101). The examples correspond to the Howland Class 24C and 25A. However, they lack handle remains and were probably handleless. Two examples are relatively huge in diameter (nos. 1095 and 1098). In the Athenian Agora, Type 25A was the most popular at the site. Together with Type 24C they covered more than a hundred years of development from the early 4th until the early 3rd century BCE (Howland 1058:66–7).

In Israel, the type appeared in small quantities at Dor where it was dated to 425–400 BCE contexts (Rosenthal-Heginbottom 1995:234, fig.5.13:1–4). Other sites are mainly along the Coastal Plain.

Date range: early 4th – early 3rd cents. BCE

1095 Closed lamp

Reg. No. 79/A/56/270; Area A, Sq. H.5

L.: 11.5; Max w.: 8.4; Base diam.: 3.6; Max h.: 6

Huge lamp. High and curved body, grooved at junction with inward turning rim, long, flattened at top nozzle, heavy raised slightly concave base with internal convex hump, U-shaped band handle. Pink ware (5YR7/4), black glaze, hard fired.

1096 Closed lamp

Reg. No. 79/A/71/137; Area A, Sq. I3, Bucket 133

L.: 10.6; Max w.: 7.7; Base diam.: 4.7; Max h.: 4.7

High and curved body, grooved at junction with inward turning rim, long, flattened at top nozzle, heavy raised slightly concave base with internal convex hump, U-shaped band handle.

Light reddish-brown (5YR6/4), hard fired.

1097 Closed lamp

Reg. No. 79/H/64/014; Area H, Sq. 1, Locus 400, Bucket 13

Base diam.: 3.8; Max h.: 2.8

High and curved body, grooved at junction with inward turning rim, heavy raised slightly concave base with internal convex hump. Reddish-yellow ware (5YR6/6) red internal slip (10R4/6), hard fired.

1098 Closed lamp

Reg. No. A/72/B241; Area A, Sq. L3, Locus 706a, Bucket 241

L.: 10; Max w.: 10

High and curved body, grooved at junction with inward turning rim, heavy raised slightly concave base with internal convex hump, U-shaped band handle.

Pink ware (7.5YR7/3) and very dark gray slip (7.5YR3/1), hard fired.

1099 Closed lamp

Reg. No. 79/A/71/139; Area A, Sq. H3, Bucket 487

L.: 8.8; Max w.: 6.6; Base diam.: 4.3; Max h.: 3.9

High and curved body, grooved at junction with inward turning rim, long, flattened at top nozzle, heavy raised slightly concave base with internal convex hump. Reddish-yellow ware (5YR6/6), hard fired.

1100 Closed lamp

Reg. No. 79/Y/68/317; Area Y, Sq. X12, Locus L-1, Bucket 11

Rim diam.: 2; Base diam.: 4; Max h.: 4

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Reddish-yellow core (5YR6/6) and black glaze, hard fired.

1101 Closed lamp

Reg. No. 79/Y/68/316; Area Y, Sq. Y14, Locus L-11, Bucket 123

L.: 8.6; Max w.: 6.3; Max h.: 3.2

High and curved body, grooved at junction with inward turning rim, long, flattened at top nozzle. Reddish-yellow ware (5YR6/6), hard fired.

Howland 25B (Nos. 1102–1103)

Small version of the former type, Howland 25A, except for the presence of a pierced lug on the left side. The purpose of that lug has been subject to many suggestions. However, it was suggested that it served for suspension (Howland 1958:72) or for a lid (Scheibler 1976:144–5). The rim turns inward or outward and the sides are steep or slightly curved and grooved at junction with top. The nozzle is long, narrow, and flat at top and the base is heavy, sometimes curved at bottom and with an internal hump. This common Attic ware is covered with black glaze of a somewhat deteriorated quality. In the Athenian Agora, the type was dated from the mid-4th to the early 3rd century BCE (Howland 1958: 72–3, Type 25B).

The Jaffa examples display gray ware with black glaze (1103) and red ware with a dull black glaze (1102). They bear the typical lug, which appeared not before the mid-4th century BCE. At Dor, similar lamps of light brown clay and gray-black glaze were dated to 350–250 BCE (Rosenthal-Heginbottom 1995:235, fig. 5.14:9–11).

Date range: mid-4th – mid-3rd cents. BCE

1102 Closed lamp

Reg. No. 79/A/71/144; Area A

Max w.: 6.6; Base diam.: 4.9; Max h.: 3.9

High and curved body, grooved at junction with inward turning rim, long, flattened at top nozzle with pierced lug on left side, concave base. Weak red ware (2.5YR6/4), traces of external and internal black burnish (2.5TY2.5/1), hard fired.

1103 Closed lamp

Reg. No. 79/A/71/140; Area A, Sq. J2, Bucket 317

Max w.: 6 Rim diam.: 2.1; Base diam.: 4.3; Max h.: 3.7

High and curved body, grooved at junction with inward turning rim, long, flattened at top nozzle with pierced lug on left side, concave base. Gray ware (5YR5/1), very dark gray slip (5YR3/1), hard fired.

Howland 32 (Nos. 1104–1105)

In-turned rim creating a sunken concaved reservoir that changed in size gradually from the earlier type with the narrow reservoir to the later one with wide reservoir (Scheibler 1976). The sunken top marks the earlier

appearance of this feature, which is such an important characteristic of the discus Roman lamps. Double-convex sides and concaved base. Pierced lug on shoulder, long, flat on top nozzle. The fabric is a fine Attic pinkish-buff colored with black glaze.

In Jaffa, a single lamp was found with a dark brown slip (1104) and a second one with a dull red/brownish slip (1105), which seems to be a local imitation.

In the Athenian Agora, the type was dated from the 2nd quarter of the 3rd century until the end of the century BCE (Howland 1958:99–100, pl.15:425–432).

At Dor and Yoqne‘am, the Attic lamp appeared along with local imitations in 250–100/50 BCE contexts (Rosenthal-Heginbottom 1995:236, fig. 5.15:9; 5.16:1–4; Avissar 1996:189, fig. xv:5). At Tell el-Ful, the imported lamps are very rare. A single lamp, which was considered the finest piece of the Hellenistic period, is dated to the 2nd century BCE (Lapp 1978:104–5, pl. 80:1). However, in Israel, the Attic prototypes and the local imitations are rather common.

Date range: 3rd–2nd cents. BCE

1104 Closed lamp

Reg. No. 79/Y/62/034; Area Y, Bucket 2–3

L.: 8.2; Max w.: 6; Base diam.: 3.4; Max h.: 2.9

Double-convex body, grooved rim creating a sunken concave reservoir, long nozzle, concave base, pierced lug on shoulder. Dark reddish-gray slip (5YR4/2), hard fired.

1105 Closed lamp

Reg. No. 79/C/65/499; Area C, Bucket 456

L.: 9.5; Max w.: 6.5; Base diam.: 4.4; Max h.: 3

Double-convex body, grooved rim creating a sunken concave reservoir, long nozzle, concave base, pierced lug on shoulder. Pink ware (7.5YR7/4), traces of dark red slip (2.5YR4/6), hard fired.

9.10.4. Hellenistic East Mediterranean Imitations

Imitation of Howland 28B–29A/Broneer IX (Nos. 1106–1107)

Rounded body with tendency to double convex body profile, long nozzle, and grooved rim and concaved base. The fabric is rather dull.

In Jaffa, two examples were found without the pierced side lug. The first was with a red external burnish (no. 1106) and the second with a buff light slip (no. 1107). The typical pierced side is missing and the base slightly concaved without the Attic characteristic hump. The type can be considered regional imitation of the Attic Broneer IX/Howland 28B–29A. At Dor, similar examples were found dated from the mid-4th to the 2nd century BCE (Rosenthal-Heginbottom 1995:236, Type 8).

Date range: 3rd–2nd cents. BCE

1106 Closed lamp

Reg. No. 79/B/60/019; Area B, Bucket 33

Max w.: 5.2; Max h.: 2.6

Rounded body with tendency to double convex body profile, grooved rim, long nozzle, concave base. Red ware (10R5/6) and burnished red on the exterior (2.5YR4/8), hard fired.

1107 Closed lamp

Reg. No. 79/Y/68/342; Area Y, Sq. Y14, Locus L–11, Bucket 123

Max w.: 5.9; Base diam.: 3.1; Max h.: 3.8

Rounded body with tendency to double convex body profile, grooved rim, long nozzle, concave base. Pale yellow slip (2.5Y8/3), hard fired.

Stick Type (No. 1108)

Small vessel with rounded side and inward turning rim. The base rises at the center higher than the rim to form an open tube. Small nozzle with a hole over the whole wick. The origin of the type is the traditional

Attic lamp of the mid-4th – 3rd centuries BCE, which was copied and manufactured until the 1st century BCE in Delos and at other Levantine sites (Bruneau 1965:28, pl. 6:348). In the Athenian Agora, the type most popular although the lamp was extremely impractical, hard to fill and holding very little oil (Howland 1058:85–6, pl. 13:376–380).

In Jaffa, a single imitation of the Greek prototype was found in Sounding X (no. 987). The dull fabric can be evidence for the Hellenistic dating. A similar example was identified in Dor as a Hellenistic imitation (Rosenthal-Heginbottom 1995:235, fig. 5.13:8).

Date range: 2nd–1st cents. BCE

1108 Closed lamp

Reg. No. 79/X/60/019; Sounding X, Bucket 33

L.: 5.2; Max w.: 4.4; Base diam.:2.4; Max h.: 2.4

Rounded body, inward turning rim, small nozzle with a hole over the whole wick. The base rises at center higher than the rim to form an open tube. Reddish-yellow ware and core (5YR6/6), red and blackslip, traces of burning on the nozzle. Many minute white grits, a few minute red grits, medium fired.

Pseudo Attic Type (Israel/Shepelah Type) (Nos. 1109–1118)

In-turned rim, set off from shoulder by deep groove, curved sides, high disc base, and long nozzle. The distinctive feature which characterized the type is the small disc base in contrast to the heavy internal convex hump of the Attic prototype. In general the lamps are small, of a semi-fine fabric with a dull peeled reddish-brown slip.

The type began to be manufactured from the Late Persian period (mid-4th century BCE) up to the Hellenistic period (2nd century BCE). It was named by several scholars as the “Shephelah” lamp (Levine 2003:115), however its distribution pattern is very wide in Israel and cannot be limited to a specific region.

In Jaffa, a huge number of complete bases and fragments of them were recovered, and nozzles were found in all areas. All of them were made of the typical red ware, unslipped or with dull external reddish-brown matte and flanked slip (no. 1109).

At Dor, they were the most common lamp in the Late Persian–Hellenistic period until the introduction of the Roman molded lamps (Rosenthal-Heginbottom 1995:235, fig. 5.13:9–10; 5.14:1–8). At Tel Michal, the type appeared in the Late Persian contexts (430–400 BCE) with the pinched lamps and probably replaced them in the Late Persian period. In Hellenistic levels (350–300 BCE), and mainly on the eastern hillock at Tel Michal, a hoard of seven lamps together with black Attic sherds was found dated to the end of the Persian period. According to the petrography analysis of one example they could have been produced in the hill region (Singer-Avitz 1989:130 fig. 9.9:6–7; 133 fig.9.10:11–12; 133 fig.9.11:3–10). The dominance of closed lamps and the minimal appearance of folded lamps at the Judean site Tell el-Ful was rather unexplained. That situation is logical in Jaffa and other Coastal Plain sites with foreign influences, but is unexpected in the hinterland.

Date range: mid-4th to early 1st cent. BCE

1109 Closed lamp

Reg. No. 79/A/62/002; Area A

L.: 8.2; Max w.: 6; Base diam.: 3.8; Max h.: 3.7

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Reddish-yellow ware (7.5YR7/6) and dark reddish-gray external burnish (5YR4/2), hard fired.

1110 Closed lamp

Reg. No. 79/J/70/080; Area J, Bucket 38

L.: 8.2; Max w.: 5.2; Base diam.:3.4; Max h.:3.8

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Light brown ware (7.5YR6/4), hard fired.

1111 Closed lamp

Reg. No. 79/A/74/074; Area A, Bucket 161

L.: 8; Max w.: 5; Base diam.: 4; Max h.: 3.5

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Pink ware (5YR7/4), brown wash on the body, hard fired.

1112 Closed lamp

Reg. No. 79/Y/64/128; Area Y, Sq. 4, Locus 606, Bucket 48

L.: 7.6; Max w.: 5.3; Base diam.: 3.3; Max h.: 3.4

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Pink ware (5YR7/3), hard fired.

1113 Closed lamp

Reg. No. 79/A/73/087; Area A, Sq. J100, Locus 1041, Bucket 399

L.: 7.5; Max w.: 5; Base diam.: 2.8; Max h.: 3.5

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Pink ware (7.5YR7/4), hard fired.

1114 Closed lamp

Reg. No. 79/Y/68/339; Area Y, Sq. Z14, Locus L-12, Bucket 95

L.: 7.2; Base diam.: 3; Max h.: 3

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Reddish-yellow ware (5YR7/6), hard fired.

1115 Closed lamp

Reg. No. 79/Y/64/127; Area Y, Sq. 1, Locus 600, Bucket 46

L.: 7.7; Max w.: 5; Base diam.: 2.6; Max h.: 3.4

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Pink ware (7.5YR7/3), hard fired.

1116 Closed lamp

Reg. No. 79/X/60/016; Sounding X, Bucket 42

Max w.: 4.8; Base diam.: 3; Max h.: 3.2

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Pink ware (7.5YR7/4), hard fired.

1117 Closed lamp

Reg. No. 79/X/60/017; Sounding X, Bucket 45

Max w.: 5.9; Base diam.: 3.1; Max h.: 4

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Very pale brown ware (10YR7/3), hard fired.

1118 Closed lamp

Reg. No. 79/C/61/302; Area C, Sq. CC101, Bucket 626

Max w.: 5.6; Base diam.: 2.2; Max h.: 3.4

Rounded body, inward turning rim set off from shoulder by deep groove, long nozzle, high slightly concave disc base. Reddish-yellow ware (5YR6/6) and core (5YR7/4), many small white and black grits, medium fired.

Kite-shaped Type (Imitation of Howland 47B) (Nos. 1119–1121)

Double-convex body with long nozzle usually decorated with a herring bone pattern. Three blunted points at the back and either side forming the kite-shaped body. The shape probably developed from the solid projecting lugs or the typical Hellenistic s-coil decoration on lateral projections. The shoulder was usually decorated with a pair of satyrs. The type is fairly common at Hellenistic eastern Mediterranean sites. The earlier examples came from Egypt at mid-to-late 3rd century and were probably of local Egyptian origin (Rosenthal-Heginbottom 1995:237). The fabric is usually fine in gray color with black glaze and was probably made in a number of manufacturing centers during the late 3rd and early 2nd centuries BCE, in Egypt, Israel (Maresha, Gezer and Nessana), and possibly on the Phoenician coast (Młynarczyk 1997:36, fig 28). Examples from Cyprus and southern Russia are displayed in the British Museum (Howland 1958:155).

In Jaffa, a few examples were found, consisting of a single complete lamp (no. 1119) and two nozzle fragments with the typical herring bone pattern (nos. 1120 and 1121). All these can be considered regional

imitations which were very common in the repertoire in Israel. In the Athenian Agora, the prototype was classified as 45A and assigned to Alexandria (Howland 1958:144, pl. 55). However, the Jaffa example seems identical to the Howland 47A type, a locally made class that was dated to the 2nd half of the 3rd century BCE (Howland 1958:154–5, Type 47B, pl. 48:613–614).⁸²

Similar lamps with an Eroses decoration occurred at many coastal sites and were identified as coming from a local northern production center (Rosenthal-Heginbottom 1995:237, fig. 5.17:5–10). At Tel Anafa, 28 examples were found with Eroses and others with mask and caduceus decorations made of gray or red ware. Both are probably of local manufacture dated from the 2nd half of the 2nd century to the early 1st century BCE (Weinberg 1971, pl.18A). At Maresha, several examples were found of kite-shaped lamps with varied decorations including the typical Eroses pattern (Levine 2003:116, fig. 6.15:156).

Date range: mid/late 3rd – late 2nd/early 1st cents. BCE

1119 Closed lamp

Reg. No. 79/A/58/143; Area A

L.: 9.7; Max h.: 2.7

Small flattened body, long nozzle. Pair of holding hands Eroses on the shoulder decorated with herring bone pattern on both sides of nozzle and center of nozzle. Dark gray ware (5YR4/1) and light brown core (7.5YR6/4), hard fired.

1120 Closed lamp

Reg. No. 79/A/74/073; Area A

Max h.: 2.5

Small flattened body, long nozzle. Rosette pattern on the shoulder, herring bone pattern (?) on the nozzle, remains of lateral s-coil lugs. Gray ware (5YR5/1), many minute black grits, medium fired.

1121 Closed lamp

Reg. No. A/72/B33.5; Area A, Sq. L3 L4, Bucket 33

L.: 5.5

Herring bone pattern on the bottom of nozzle. Light gray ware (10YR7/2) and dark grayish-brown core (10YR4/2), many minute black grits, soft fired.

Delphiniform Type

Small flattened “watch-shaped” body. Flat or ring base. The nozzle is long with a flat wick hole, undecorated or decorated with petals and palmettes. One or two s-coil lug in lateral projecting. The shoulder is decorated with a geometric pattern, usually sets of ribbing radiating (“rays”) motifs such as the herring bone pattern, or the ovuli pattern, dividing the nozzle from the shoulder. One vertical handle on back side.

The type can be defined as preliminary evidence of the Hellenization of the Levant. It was the first locally made prototype of molded lamp that was manufactured and flourished in Israel.

The term Delphiniform was attributed by Walters to the common Hellenistic East Mediterranean lamps that were first found in large numbers in Delos (728 lamps) and dated from the mid-2nd to the early 1st century BCE (Bruneau 1965:81–88, pl. 20–21). At Tarsus, they appeared in large numbers as well (Tarsus IV) in the top layer of the mid-Hellenistic period, and were dated from the late 3rd to the early 2nd century BCE. However, their center of production is still vague (Rosenthal and Sivan 1978:13). Howland considered his Type 45A in the Athenian Agora as the Egyptian prototype of the Delphiniform, which was later on imitated in Attic ware (Type 45B–C). Their origin is not in Delos but rather Egypt. They were brought to Delos as commercial products (Howland 1958:144).

In Israel, the Egyptian prototype was imitated and manufactured at regional workshops. NAA analysis on two lamps from Masada reveals an unknown source from the Coastal Plain of the northern Sharon and Western Carmel regions (Barag and Hershkovitz 1994:22). Młynarczyk defined those lamps as Type A and B Prime. A Syro-Palestine imitation of the Egyptian prototype was dated to 200–100 BCE (Młynarczyk 1997:22–31, Table 2, fig:14–25).

⁸² At Dor, the type was defined as Howland 45A and in the Schlossinger Collection as Howland 45B.

In Jaffa, a large number of completed Type A Prime lamps made of gray ware with a black peeled slip were recovered. The Jaffa repertoire was probably from Phoenician coastal towns workshops that were part of the Ptolemaic realm.

The Jaffa repertoire included several subtypes that were developed simultaneously.

A. Double S-Coil (Type B Prime, Młynarczyk)⁸³ (Nos. 1122–1125)

This prototype, which preserved the kite-shaped body through a double s-coil and ring base, was probably a later imitation of the previous kite-shaped prototype (no. 1119), which had been developed in eastern Mediterranean workshops during the 2nd–1st century BCE (Rosenthal-Heginbottom 1995:240). In the Athenian Agora, a local imitation of the eastern Delphiniform lamps with double s-coil lug appeared dated to the late 3rd–2nd century BCE (Howland 1958:145–6, Type 45B–C, pl 47:583–588). In Israel, the type appeared during the 2nd–1st century BCE in Dor (Rosenthal-Heginbottom 1995:240, fig. 5.18:4–5), Ramat Hanadiv (Silberstein 2000, pl. XI:13), Ashdod (Dothan 1971:57, fig. 20:3), in the Jewish Quarter in Jerusalem (Rosenthal-Heginbottom 2003:218–9, fig. 6.4:19), and Maresha (Levine 2003:116, fig. 6.15:159).

Date range: 2nd–1st cents. BCE

1122 Closed lamp

Reg. No. 79/Y/64/129; Area Y, Sq. 1, Locus 600, Bucket 16

L.: 8.1; Max w.: 5; Base diam.: 2.8; Max h.: 2.4

Small flattened body, long nozzle with flat wick hole, ring base. Radial sets of ribbing on the shoulder, egg pattern around the rim, two pairs of horn pattern at the bottom of nozzle, two lateral s-coil lugs. Light brownish gray ware (10YR6/2) and black wash, medium fired.

1123 Closed lamp

Reg. No. 79/C/65/501; Area C, Sq. CC103, Locus 446, Bucket 953

Max w.: 6.8; Base diam.: 3.7; Max h.: 2.4

Small flattened body, long nozzle, ring base. Radial sets of sun ray pattern on the shoulder, two lateral s-coil lug. Pale red ware (2.5Y7/2), black wash, medium fired.

1124 Closed lamp

Reg. No. 79/C/61/299; Area C, Bucket 653

Max w.: 6.2; Base diam.: 2.2; Max h.: 2.7

Small flattened body, concave base. Radial sets of sun ray pattern on the shoulder, two lateral s-coil lug. Dark reddish-gray ware (2.5YR4/1), medium fired.

1125 Closed lamp

Reg. No. A/70/B22.2; Area A, Sq. K4, Bucket 22

Max w.: 5.5; Max h.: 2.6

Double-convex body. Remains of lateral volute pattern. Reddish-yellow core (5YR7/6) dark red wash (2.5YR4/6), many minute black grits, hard fired.

B. Single S-Coil (Type A Prime, Młynarczyk)⁸⁴ (Nos. 1226–1132)

One s-coil lug and flattened base. Decorated usually with ribbing and herring bone pattern on shoulder. Handled examples are rare. One complete lamp characterized by vertical handle on the back side appeared (no. 1126). Another one appeared with a palmette pattern on the nozzle (no. 1132). The origin of the form was the Rhodian prototype dated to the early 3rd century BCE.

Within the assemblage in Israel, the type seems to be the most common local Hellenistic type, which flourished throughout the area not earlier than the 2nd to the early 1st century BCE (Rosenthal and Sivan 1978:13, no.22; Gitin 1995:260, Type 247). The type was found in northern Tel Anafa (Weinberg 1971:104, pl.18b), along the Coastal Plain in Dor (Rosenthal-Heginbottom 1995:238, Type 12A, fig. 5.17:11–13; 5.18:1–5), Shiqmona (Elgavish 1974, pl. XXVI:267; XXVIII:273–4), Tel Michal (Fischer 1989:179,

⁸³ Młynarczyk 1997:26–27, figs. 19–23.

⁸⁴ Młynarczyk 1997:22–23, figs. 14–18.

fig.13.1:13–4; 13.2 :24), Ashdod (Dothan 1967, fig.8:5), (Dothan1971:57, fig. 20:11) and Tirat Yehuda (Yeivin and Edelstein 1970:61, fig.10:3) during the 2nd and until the mid-1st century BCE. More examples appeared in Delos dated to the 2nd century BCE (Bruneau 1965:81–2, pl. 20:3977).

In Jerusalem and its vicinity, the type appeared at Judean sites such as Qumran and Samaria at the mid-1st century BCE levels (Lapp 1961:194, Type 83.2; Crowfoot et al 1957: 370, fig. 87:1) and Maresha (Levine 2003:118, fig. 6.16:161–2). In an unexpected way, the type was recovered from Jason's Tomb in the same context with the typical southern folded rim lamps (Rahmani 1967:77, pl. 9:4–7). No comparable form of lamp appears until the 2nd half of the 1st century BCE, giving the type a virtual monopoly for nearly a century (Kennedy 1963:71).

Date range: 2nd–1st cents. BCE

1126 Closed lamp

Reg. No. 79/C/65/500; Area C, Bucket 821

L.: 11; Max w.: 5.5; Base diam.: 2.8; Max h.: 2.9

Small flattened body, long nozzle with flat wick hole, flat base, one wide grooved loop handle from behind the rim to the base. Concentric sets of herring bone pattern on the shoulder, one lateral s-coil lug. Gray ware (10YR5/1), black wash, medium fired.

1127 Closed lamp

Reg. No. 79/A/60/008; Area A, Sq. H11, Locus 350, Bucket 57

L.: 9 Max w.: 5.3; Base diam.: 2.6; Max h.: 2.2

Small flattened body, long nozzle with flat wick hole, disc base. Concentric sets of sun-ray pattern on the shoulder and pair of herring bone pattern on the bottom of nozzle, one lateral s-coil lug. Reddish-gray ware (2.5YR6/1), medium fired.

1128 Closed lamp

Reg. No. 79/A/60/006; Area A

L.: 6; Max h.: 2.5

Flat base. Concentric set of sun-ray pattern on the shoulder.

Reddish-gray ware (2.5YR6/1), medium fired.

1129 Closed lamp

Reg. No. 79/A/58/096; Area A, Sq. H.11

Max w.: 6.6; Max h.: 1.4

Small flattened body, long nozzle. Concentric sets of sun-ray pattern on the shoulder and pair of herring bone pattern on the bottom of nozzle. Pale red ware (2.5YR7/4) and dark reddish-gray core (2.5YR5/1) black wash, hard fired.

1130 Closed lamp

Reg. No. 79/C/61/310; Area C, Sq. CC101, Bucket 446

Rim diam.: 1.5; Max h.: 1.2

Small flattened body. Concentric sets of sun-ray on the shoulder and pair of herring bone pattern on the bottom of nozzle. Dark gray core (10YR4/1), black wash, many small white grits, hard fired.

1131 Closed lamp

Reg. No. 79/C/61/317; Area C, Sq. CC100, Bucket 375

Max h.: 2

Small flattened body, traces of loop handle. Concentric sets of sunray pattern on the shoulder. Dark gray core (10YR4/1) and black wash. Many small white grits, hard fired.

1132 Closed lamp

Reg. No. 79/C/65/502; Area C, Sq. CC103 Locus:446, Bucket 953

Max h.: 3

Long nozzle decorated with palmette pattern. Reddish-gray ware (2.5Y6/1) weak red core (10YR5/4), black wash, hard fired.

C. Leaf-shaped Handle (Nos. 1133–1134)

Rounded body, flattened base, long nozzle. Handle shields in the shape of a large leaf rising from the back side. Geometric decoration, usually sets of ribbing on shoulder with s-coil of lateral projecting. The ware is grayish-brown with black slip and is probably of eastern manufacture. Their prototype was probably the kite-shaped type and was classified by Młynarczyk as Type D dated from the end of 3rd to the early 2nd century BCE (Młynarczyk 1997:34–35, fig. 27). In Delos, the type was dated to the mid-2nd century BCE (Bruneau 1965:86, pl. 21:4142).

In Jaffa, two fragments were found made of coarser gray ware with broken handle decorated on the back side with curling volute-like ribbons. (1133–1134). At Maresha, similar type was classified under the Hellenistic Delphiniform gray ware lamps dated to the mid-1st century BCE (Levine 2003:118–119, fig. 6.16:166). However, the Jaffa examples seem to be a local imitation of the Egyptian prototype.

Date range: late 3rd–2nd cents. BCE

1133 Closed lamp

Reg. No. 79/A/70/056; Area A, Sq. L4, Bucket 312

Max w.:5.7; Base diam.: 5.2; Max h.: 3

Flat base with concentric groove. Four concentric sets of sun-ray pattern on the shoulder and herring bone pattern at the bottom of nozzle, s-coil pattern at two lateral projections. Gray ware (10YR5/1), many minute black grits, hard fired.

1134 Closed lamp

Reg. No. 79/C/65/504; Area C, Bucket 726

Rim diam.: 1.4; Max h.: 2.7

Traces of grooved flat base, broken leaf-shaped handle. Concentric sun-ray pattern on the shoulder with two volute decoration splayed from base of handle. Gray ware (10YR5/1), black wash, many minute black grits, hard fired.

Multi-Nozzle Type (No. 1135)

These are usually seven nozzle lamps. The nozzles are long and flat at the wick hole, and are decorated with a herring bone pattern. In the Jaffa example, only two of the seven nozzles survived. The type was manufactured in the eastern Mediterranean, probably as an imitation of the Egyptian kite-shaped type with Eros decorations (Rosenthal-Heginbottom 1995:241). In Delos, the type is dated from the mid-2nd to the early 1st century BCE (Bruneau 1965:102, pl. 26:4449). At Dor, similar lamps were dated to the 2nd century BCE (Rosenthal-Heginbottom 1995:241, fig 5.19:1–2).

Date range: 2nd – early 1st cent. BCE

1135 Closed lamp

Reg. No. 79/A/70/058; Area A, Sq. K4, Bucket 211

Max h.: 2.8

Double long nozzle. Herring bone pattern on nozzles. Gray ware (10YR6/1) and core (10YR5/1), many minute black grits, hard fired.

Knidos Type (Howland 40/Broneer XIII) (Nos. 1136–1137)

Double-convex body with wide and deep reservoir round a small central wick hole. The shoulder is usually decorated and set off-shoulder by groove. Short and broadly flaring nozzle terminated with sharp flukes on the side resembling common bronze lamps. The base is high and the handles rise vertically above the rim. The influence of metal work can also be seen in the hard fabric in dark gray to blackish color and the metallic appearance of the gray glaze. The type developed before 200 BCE but became one of the most common Hellenistic lamps during the 1st half of the 2nd century BCE (Broneer 1930:53–54, pl. V:190–192). It was first found in large numbers in Knidos and probably were manufactured there.

In Jaffa, two examples were found. The first complete lamp with molded, decorated shoulder was attributed in the Athenian Agora and in Delos to the late 2nd and early 1st centuries BCE (Howland 1958:126–7, pl. 20:521–522; Bruneau 1965:33–34, pl. 8:1716) (no. 1136). The second nozzle fragment displays the typical side flukes of the Knidian lamps (no. 1137).

Date range: 2nd – early 1st cent. BCE

1136 Closed lamp

Reg. No. 79/C/61/322; Area C, Sq. CC101, Bucket 625

L.: 9.3 Max w.: 6.7; Base diam.:3.8; Max h.: 4

Double-convex body with wide and deep reservoir, round and small central wick hole, short and broadly flaring nozzle terminated with sharp flukes at the side, high base, rising vertically above rim handle. Two sets of relief plant patterns on shoulder. Gray ware (7.5YR5/1), black slip, hard fired.

1137 Closed lamp

Reg. No. 79/A/70/063; Area A, Sq. L3, Bucket 248

Max h.: 2.9

Short and broadly flaring nozzle terminated with sharp flukes at the side. Very dark gray ware (10YR3/1), hard fired.

Ephesos Type (Howland 49/Broneer XIX)

A. With Three Drain Holes (Nos. 1138–1139)

The typical type with double convex sides and with a sharp angle between the two halves. The top is flat and was added separately after the lamp was made for the purpose of collecting the spilled oil. Three drain holes were usually punched through the reservoir for draining the collected oil. Long nozzle terminated with arched wick hole. One loop handle rising above rim. The shoulders are fully decorated with geometric, naturalistic, or a combination of the two patterns. The fabric is dark gray with a thin gray slip with metallic shine. However, the ware tends to be poorly preserved.

In Jaffa, two examples were found. The type was most common in Asia Minor especially in Ephesos, Sardis and Delos (Broneer 1930:69). In Corinth, the type was classified as XIX and was in common use from the late 2nd to the late 1st century BCE (Broneer 1930:70). The Ephesos lamps did not arrive at the Athenian Agora before 125 BCE and continued to be used until the early 1st century CE (Howland 1958:166–7, Type 49, pl. 49:649–664).

Date range: late 2nd – late 1st cents. BCE

1138 Closed lamp

Reg. No. 79/X/60/015; Sounding X, Bucket 32

Max w.: 5.6; Base diam.: 4.1; Max h.: 2.9

Double-convex body, sunken reservoir with three drain holes surrounded by raised collar, flat disc base, traces high loop handle. Concentric palmette pattern with three dots between each of them on the shoulder. Very dark gray ware (10YR3/1), hard fired.

1139 Closed lamp

Reg. No. 79/C/65/506; Area C, Sq. CC102, Bucket 994

Base diam.: 2.6; Max h.: 3.4

Double-convex body, sunken reservoir with three drain holes surrounded by raised collar, flat disc base, traces of high loop handle. Concentric palmette pattern bordered by grooved lines on the shoulder. Gray ware (10YR5/1), black slip, hard fired.

B. With Channeled Reservoir (No. 1140)

Sunken reservoir that is connected by a channel to the central filling hole, with the wick hole running throughout the channel. No traces of drain holes. Examples from Corinth were described as a later development of Type XIX dated to the Early Roman period (Broneer 1930:68, fig. 28:324). In the Athenian Agora, a similar Attic lamp with channeled top was described as a transitional type from the elongated Hellenistic to the Roman discus lamp (Howland 1958:203, pl. 53:794). In Israel, examples were found at Tel Anafa (Weinberg 1971:105, fig.18:b), Samaria (Crowfoot et al 1957:370, fig.87:5), and in the Schlossinger Collection (Rosenthal and Sivan 1978:12, no 19). More examples were found in the British Museum (Bailey 1980:389, pl. 110:Q3174; 390, pl. 112:Q3187; 392, pl. 113:Q3199) and Delos (Bruneau 1965: 74, pl. 18: 3116).

Date range: Hellenistic–Early Roman

1140 Closed lamp

Reg. No. 79/C/61/316; Area C, Sqs. DD100–DD101, Bucket 468 and 469

L.: 8.8; Max h.: 3.1

Double-convex body, sunken reservoir connected to the central filling hole with the wick hole through a channel, arched nozzle, flat base. Corn stalk pattern on the shoulder. Dark gray core (10YR4/1) black wash, hard fired.

9.10.5. Roman Imperial Lamps

Circular body with depressed decorated discus, flattened base, small filling hole usually placed so as not to disturb the relief design. The fabric is thin red or gray color with a black metallic glaze.

The discus lamps were well known in the Roman Empire and across Europe and Asia Minor. The type can be considered an Italian imitation of the traditional Late Hellenistic bronze lamps. The idea was to create comparatively cheap lamps with all the elegance of metal work. They were made in Italy during the Early Roman period and were traded throughout the eastern Mediterranean. The most common types in Israel are Broneer XXI–XXV which is displayed in the Schlossinger Collection in relatively large numbers and variations (Rosenthal and Sivan 1978:21–31, nos. 55–108). However, in Israel their appearance is limited in number and geographical range (Kennedy 1963:73, pl. xx:491; XXI:492–496). For example, in Jericho four sherds were recovered at the Winter Palace dated to 1st century CE, pre-70 CE (Bar-Nathan 2002:190, pl. 28:549–552). In Jerusalem, a small group of post-70 CE Imperial lamps was recovered (Tushingham 1985:61, fig. 25:10–13).

The lack of a rich and homogenous assemblage of Imperial discus lamps in Israel was explained as the outcome of the Jewish aversion to pictorial renditions of human or animal figures (Kennedy 1963:73). That suggestion is irrelevant in accordance with the rich figural decorated mosaics, sarcophaguses and the local disc lamps.

In Jaffa, a relatively high number of imported discus lamps were found. The main area of concentration was the residential house in Area C.

Leaves Decorated Handle (Broneer XXI) (Nos. 1141–1142)

Large lamp, with wide discus decorated with single head or figural scenes, one or more long nozzle with a double volutes decorated wick hole. The handle is in the shape of leaves, crescents and busts and was formed separately and added. The fabric is very fine, made of dark gray ware with a metallic black slip. In Corinth, the form was classified as Type XXI dated to the 1st century CE (Broneer 1930:73–76, pl. vii–ix:383–417).

In Jaffa, two large handles were found. The first was of a triangular shape decorated with a palmette pattern, a bud, and two acanthus leaves at the base (no. 1141). Similar handles were recovered from other Coastal Plain sites such as Dor and Caesarea dated from the late 1st century BCE to the 1st century CE (Rosenthal-Heginbottom 1995:241, fig. 5.20:1–2; Oleson 1994:128, fig. 48:L30). More examples appeared in the Jewish Quarter of Jerusalem (Rosenthal-Heginbottom 2003:218, fig. 6.12:12). The second example (1142)

was dated in Masada to the 1st half of the 1st century CE (Bailey 1994:82, no. 152) and in Samaria to the 2nd century CE (Crowfoot et al 1957:371, fig. 88:5).

Date range: late 1st cent. BCE to 2nd cent. CE

1141 Closed lamp

Reg. No. 79/C/61/370; Area C

Max h.: 9.5

Large triangular shaped handle. Palmette pattern at the base, above two acanthus leaves. Gray ware (10YR5/1), black slip, hard fired.

1142 Closed lamp

Reg. No. 79/C/61/318; Area C, Sq. CC100, Bucket 375

Leaf shaped handle in high relief. Very dark gray ware (10YR3/1), black slip, many small white grits, hard fired.

Figural Decorated Discus (Broneer XXII–XXIII) (Nos. 1143–1148)

Sunken discus as reservoir with figural decorations, flat shoulder with concentric grooves, small nozzle with double volute decoration. Flat base. The fabric is thin and fine with traces of a dark red and black slip.

In Jaffa, several lamps were recovered. The first complete example was stamped on the bottom of a base with *planta pedis* (no. 1143) dated to the 2nd quarter of the 1st century CE (Broneer 1930:78–79, pl. X:454–455). A similar stamped lamp was found in Dor in a context with five Herodian lamps, and was identified as a Broneer XXIII type (Rosenthal-Heginbottom 1995:242, fig. 5.20:8). In the British Museum the same stamped *planta pedis* was identified as of Syrian origin and occurs on a Levantine lamp probably from Salamis or Curium dated to 40–100 CE (Bailey 108, fig. 142:Q2292; 283, pl. 57:Q2292). That lamp was probably a Levantine imitation of the Italian prototype.

According to the discus decoration, the lamp no. 1144 with a seated Fortuna figure had parallels at the British Museum where the type was identified as Broneer XXI, dated to the 1st century CE (Bailey 1980:29–30, fig. 29:Q945–947). However, the Jaffa example lacks the typical handle. The gladiator decoration on lamp no. 1146 was identified in the British Museum as *hoplomachi*, dated to the Augustan period (Bailey 1980:53–54, fig. 56:Q820). In Caesarea, a similar decorated lamp was identified as a Broneer XXII type dated from the mid-1st century BCE to the mid-1st century CE (Oleson 1994:100, fig. 31:L26). A fragmented discus decorated with a radial ray pattern (no. 1147) appeared in Caesarea (Oleson 1994:113, fig. 39:L28) and in Dor (Rosenthal-Heginbottom 1995:242, fig. 5.20:11). The type was classified as a Broneer XXI–XXII type dated from the Augustan period to the 1st century CE. A fragmented discus decorated with two legs seems to be a low quality lamp which was probably an Eastern imitation of Italian prototypes (no. 1148). At Dor, similar fragments were found which can be considered local Phoenician coastal productions in provincial workshops till the 3rd century CE (Rosenthal-Heginbottom 1995:243).

Date range: 1st cent. BCE to 1st cent. CE

1143 Closed lamp

Reg. No. 79/C/61/294; Area C, Sq. DD101, Locus 429, Bucket 651

L.: 8.6 Max w.: 6.5; Base diam.: 2; Max h.: 2

Circular body with depressed decorated discus, small filling hole pierced on discus, small nozzle, flattened base. Unidentified figure (Dolphin?) on the discus, two volutes on the nozzle, impressed “*planta pedis*” on the disc base. Light brownish gray ware (2.5Y6/2), black slip, medium fired.

1144 Closed lamp

Reg. No. 79/C/61/304; Area C, Sq. DD101, Bucket 91

Max h.: 3.8

Double-convex body with depressed decorated discus, small filling hole pierced on discus. Figure of seated Fortuna to the left with cornucopia and probably steering oar in her right hand, on the discus. Very pale brown ware (10YR8/3), medium fired.

1145 Closed lamp

Reg. No. 79/C/61/290; Area C, Sq. CC100, Bucket 112

Max w.:8.4; Max h.: 2.5

Double-convex body with depressed decorated discus, small filling hole pierced on discus, flat base. Standing figure, on the discus. Very pale brown ware (10YR8/3), hard fired.

1146 Closed lamp

Reg. No. 79/C/61/305; Area C, Sq. DD100, Bucket 113

Max h.: 1.2

Sunken discus with pillar hole. Muscular man facing backward and holding a bow in his right hand (Thracian Gladiator?) on the discus. Very pale brown ware (10YR8/3), medium fired.

1147 Closed lamp

Reg. No. 79/H/68/038; Area H, Bucket 9

Max h.: 1.5

Sunken discus. Concentric sun-ray pattern on the discus. Pink ware (7.5YR8/3), medium fired.

1148 Closed lamp

Reg. No. 79/H/68/039; Area H, Bucket 7

Discus fragment decorated with lower part of human pair of legs with wick hole in between them. Pinkish-white ware (10YR8/2) and pink core (10YR8/3), medium fired.

North Africa Type (Broneer XXV) (Nos. 1149–1150)

Rounded body decorated on shoulder with two or three raised dots. Plain discus and ring base. The majority have a heart-shaped nozzle, unslipped or with a dull red slip and dated to the 3rd–4th century CE. In Jaffa, two fragments were recovered with raised dots decoration on the shoulder. Similar lamps in the British Museum collection were identified as of Carthage origin dated to 220–370 CE (Bailey 1980:191, pl. 17:1725–1729). The single complete lamp that appeared in Caesarea was of uncertain Italian or North African origin (Oleson 1994:128, fig. 48:L32).

Date range: 3rd–4th cent. CE

1149 Closed lamp

Reg. No. 79/A/72/107; Area A, Bucket 450

Max h.: 3

Double-convex body with depressed undecorated discus, small filling hole pierced on discus, flat base, vertical handle from the discus to the base with a hole at the center. Small knobs pattern on the shoulder. Pink ware (10YR7/3), many minute white and gray grits, hard fired.

1150 Closed lamp

Reg. No. 79/H/68/037; Area H, Bucket 3

Fragment of sunken discus decorated with small knobs pattern on the shoulder. Very pale brown ware (10YR7/4), many minute black grits, hard fired.

Corinthian Type (Broneer XXVII) (Nos. 1151–1155)

Double-convex body, relatively narrow and deep decorated discus, broad shoulder with vegetable motives decorations. Small rounded nozzle. One molded handle with two-three grooves on the edge. Grooved base with incised inscription on bottom. The fabric is hard fired and unslipped.

The type (Broneer XXVII) was identified as a local Corinthian imitation of the Italian Type XXV during the 2nd century CE. The wide distribution of the type at Greek sites and chiefly at Corinth, where more than 500 handles were found, is in itself convincing proof that Corinth was a center of production for that type of lamp (Broneer 1930:94).

Type XXVII was divided into four subtypes. In Jaffa, the second subtype XXVIIb was found decorated with vines or tendrils (1151–1153) and with dots (1154). The type is missing from any other assemblage in Israel. The single example with a concentric petal pattern on a sunken discus appeared in Nazareth and Sumaqa dated to the Late Roman period (Bagatti 1967:301, fig. 233:12,15, 235:32; Kingsley 1999:283, fig.13:8).

Date range: 3rd–4th cents. CE

1151 Closed lamp

Reg. No. 79/A/73/092; Area A, Locus 752, Bucket 600

Max w.: 8.6; Max h.: 3.2

Double-convex body with small deeply sunken discus and small filling hole at the center, broad shoulder, elevated and grooved loop handle from behind the body to the base. Vine pattern on the shoulder, radial sun-ray pattern on the discus. Pink ware (5YR7/4), many minute white grits, hard fired.

1152 Closed lamp

Reg. No. 79/A/73/091; Area A, Bucket 611

Max w.: 7.2; Max h.: 1.6

Small deeply sunken discus with small filling hole at the center, broad shoulder, elevated and grooved loop handle from behind the body to the base. Vine pattern on the shoulder, radial ray pattern on the discus. Pink ware (7.5YR8/3), many minute black grits, hard fired.

1153 Closed lamp

Reg. No. 79/C/61/319; Area C, Bucket 116

Max h.: 2.2

Broad shoulder, elevated and grooved loop handle from behind the body to the base. Vine pattern on the shoulder. Very pale brown ware (10YR8/4), hard fired.

1154 Closed lamp

Reg. No. 79/G/64/036; Area G, Bucket 19

Max h.: 1.6

Rounded body and shoulder. Circular pattern on the shoulder edge, rossete (?) pattern on the discus. Pink ware (7.5YR8/3), medium fired.

1155 Closed lamp

Reg. No. C/61/B50.1; Area C, Sq. CC100, Bucket 50

Max w.: 7.5; Max h.: 5

Double-convex body with elevated and grooved loop handle from behind the body to the base.

9.10.6. Local Roman Lamps

“Pseudo Imperial” Israel Type

Rounded flattened body, medium size sunken discus usually decorated and bordered by ovolo pattern, shoulder often decorated with double axes and double volutes pattern, small rounded nozzle, flattened sometimes with impressed ornaments base. Potter marks are common. No handle. The fabric is fragile and easily broken, in light red and gray ware and red/brownish and gray dull slip. The fabric quality deteriorated during the period of manufacturing from the 1st until the 3rd century CE.

The type can be considered the most common local type of lamps in the Levant during the Early Roman period. It was originally an imitation of the Italian Broneer XXII–XXIII type and was closest to the Broneer XXV type (Rosenthal and Sivan 1978:36).

The wide distribution of the type was not limited to pagan inhabitants despite the common pictorial discus decoration, which were offensive to religious Jews. The type was in common use by the Jewish community in Jerusalem and its vicinity (Rosenthal and Sivan 1978:85–89, nos. 347–367 with full references, mainly in the hinterland) during the Early Roman period besides the local Herodian lamps, as evident from the appearance of the lamps in Jewish cemetery at Jericho (Killebrew 1999:129, fig. III.65:7) and other Jewish ossuary tombs (Kahane 1952, fig. 3:24–26, 4:6). After the Second Jewish Revolt they appeared next to the southern type lamps in Jewish settlements. In the City of David, a few fragments were found which can stretch their use to the 2nd half of the 5th century CE (Magness 1992a:153, fig. 6:11). Several examples with a decorated discus appeared in the Jewish village of Sumaqa (Kingsley 1999:283, fig. 13:3–4). Their distribution range along the Coastal Plain continued from the late 1st until the 4th century CE. They appeared in Dor (Rosenthal-Heginbottom 1995:246, fig. 5.23:2), Caesarea (Blakely 1987:69–70, fig. 22), and Ramat Hanadiv (Silberstein 2000:451–8, pl. XIII:12) etc.

In Jaffa, several types of lamps were found. Most of them were like the Imperial lamps, which were recovered in the residential house in Area C. They can be divided into three subtypes.

A. Figural Scene on Discus (Nos. 1156–1158)

Two discus fragments with unrecognized figural decoration (nos. 1157 and 1158) and the third with a human head shown *en face*, probably the head of some anonymous divinity (no. 1156). A similar example dated to the 2nd–3rd century CE was displayed near Beth-Shean (Kennedy 1963:73, pl xxii:508). In the Schlossinger collection, the type with figural scenes is most common and is dated to the early development stage, probably during the 1st century CE with parallels throughout Israel (Rosenthal and Sivan 1978:85–90, nos.347–367 with full references).

B. Geometric Pattern on Discus (Nos. 1159–1160)

The stamped *planta pedis* on lamp no. 1159 confirms its source in Levantine workshops, dated between 40–100 CE (Bailey 1980, fig. 142:Q2292; 283, pl. 57:Q2292). Another example with a geometric decoration appeared in Nazareth, dated to the 3rd–4th century CE (Bagatti 1967:290, fig. 235:12).

C. Plain Discus (Nos. 1161–1164)

Most of the Jaffa examples feature an undecorated discus. Some were with a bordered ovolo pattern (nos. 1161 and 1164) and others with ivy leaves (no. 1163). Three examples (nos. 1161–1163) were made of the same finer fabric with a homogenous black slip which characterized the previous no. 1159 lamp. The appearance of a stamped *planta pedis* on the bottom of one example (no. 1161) attributed them to the same Levantine workshops dated between 40–100 CE (Bailey 1980, fig. 142:Q2292; 283 pl. 57:Q2292). Many examples of the plain discus type appeared during the late 1st–3rd centuries CE throughout Israel. They were found at northern sites such as Nazareth (Bagatti 1967:290, fig. 235:7,9), in the Beth She'arim catacombs (Avigad 1955:217, fig. 3:1–3), and along the Coastal Plain in Ibreiktas (Kletter 1998:53, fig. 5), Sumaqa (Kingsley 1999:283, fig.13:4), Dor (Rosenthal-Heginbottom 1995:246, fig. 5.22:10; 5.23:1–2), Caesarea (Blakely 1987:69–70, fig. 220), Ramat Hanadiv (Silberstein 2000:451–8, pl. XIII:12) and Mevorakh (Rosenthal 1978:17, fig.2:20). They were also found at southern sites, in Jericho (Killebrew 1999:129, fig.III.65:7) and Jerusalem (Hamilton 1940:45, fig. 23:19, 25–26; Hershkovitz 1987 319–21 fig. 11:5, pl. 13).

Date range: 1st–3rd cents. CE

1156 Closed lamp

Reg. No. 79/D/63/062; Area D, Bucket 41

L.: 8.5; Max w.: 7.2; Base diam.: 4.2; Max h.: 2.1

Circular flat body, small rounded nozzle, sunken discus, concave base.

Concentric ovolo pattern and two double axes on the shoulder; two volutes between wick hole and shoulder ridge; protome (god head ?) surrounded by concentric leaves on the discus. Very dark gray wash (7.5YR3/1), hard fired.

1157 Closed lamp

Reg. No. 79/G/64/065; Area G, Bucket 77

Max h.: 1.8

Circular flat body, sunken discus. Unidentified decoration on discus. Pinkish-white ware (2.5Y8/2), medium fired.

1158 Closed lamp

Reg. No. 79/C/61/312; Area C, Sq. DD100–CC101, Bucket 140

Max h.: 1

Sunken discus. Plant pattern on the discus, stamped ovolo pattern on the shoulder. Weak red ware (2.5YR6/4) and dark red slip (2.5YR4/8), medium fired.

1159 Closed lamp

Reg. No. 79/C/61/291; Area C, Bucket 684

L.: 8.5 Max w.: 7.5; Base diam.: 1.8; Max h.: 2.5

Circular flat body, small rounded nozzle, sunken discus, flat base. Ovolo pattern on the shoulders, incised vertical lines pattern on the discus, and *planta pedis* stamped on the bottom of base. Pale red ware (2.5Y7/3), black slip, hard fired.

1160 Closed lamp

Reg. No. 79/C/61/313; Area C, Sq. DD102, Bucket 329

Max h.: 1.4

Sunken discus. Ovolo pattern on shoulder, upper panel with lines pattern and two lower empty panels on the discus. Reddish-gray ware (5YR5/1) and black slip, medium fired.

1161 Closed lamp

Reg. No. 79/C/61/296; Area C, Sq. DD101, Locus 429, Bucket 614

L.: 8.5; Max w.: 7.5 base: 3; Max h.: 2.4

Circular flat body, small rounded nozzle, sunken discus, flat base. Two concentric grooves on the shoulder and ovolo pattern on the discus. Dark brown slip (7.5YR3/2), hard fired.

1162 Closed lamp

Reg. No. 79/C/61/292; Area C, Sq. DD101, Locus 429, Bucket 614

L.: 8.7; Max w.: 7; Base diam.: 4.5; Max h.: 2.4

Circular flat body, small rounded nozzle, sunken discus, broad low ring base. Double axes decoration on shoulder, two volutes between wick hole and shoulder ridge. Dark reddish-gray core (2.5Y4/1), black slip, hard fired.

1163 Closed lamp

Reg. No. 79/C/61/297; Area C, Sq. DD101, Locus 428, Bucket 536

L.: 8 Max w.: 7; Base diam.: 3; Max h.: 2.5

Circular flat body, small rounded nozzle, sunken discus, flat base. Band of heart shaped leaves on the shoulder. Weak red ware (2.5Y6/2), light gray slip (7.5YR7/1), medium fired.

1164 Closed lamp

Reg. No. 79/D/63/061; Area D, Bucket 41

Base diam.: 4; Max h.: 2.4

Circular flat body, small rounded nozzle, sunken discus, concave base. Ovolo pattern on the shoulder, double volutes between wick hole and shoulder ridge. Dark red wash (2.5YR4/8), hard fired.

Herodian Type

Wheel made lamp. The body was rounded, wheel made, with flattened base and medium size nozzle attached by bow-shaped knife with a splayed end. The large filling hole is either surrounded by a narrow discus or lacking a discus, no handle. The lamp is undecorated except for a few cases of nozzle decoration: circular dots, at both sides of nozzle end and rows of incision at bottom of nozzle.

The nickname “Herodian Lamps” is attributed to the type because of their appearance during the reign of Herod the Great (Smith 1961:53–65). Recent excavations is widening the period of use for this type to the entire Early Roman period until the mid-2nd century CE as their span, while the first appearance was at the end of the Herodian period (Rosenthal and Sivan 1978:80, nos. 331–334; Bar-Nathan 2002:112–113). Their distribution pattern is unlimited. The type was in common use especially in Jewish Judea and in the Coastal Plain, the Galilee, and the Golan.

The type was studied by several scholars who divided them according to their chronological development (Kennedy 1963, Type 3, pl. XX:487; Smith 1961; Kahane 1952:136–138). However, it seems as if all the subtypes occurred simultaneously. In the Jericho palaces, a large assemblage of Herodian lamps was found, which strengthened the accepted opinion today. The type is most common in contexts dated to the 1st century CE (Herodian Level 3) while its first appearance in small quantities occurs at the end of Herod’s reign, 15 BCE–6 CE (Herodian Level 2) (Bar-Nathan 2002:112–113, pl.18:303; 188–190 pl.28:543).

In Jaffa, in Area C, a large assemblage of rim fragments (nos. 1052–1057) were found next to the “pseudo Attic lamps” in Israel (nos. 988–998). Other fragmentary examples were recovered from Area G, in Pits D, J and X (nos. 1048–1051).

In Jaffa, decorated and undecorated examples appeared. The two variations cannot be divided into two clear chronological subtypes. However, the decoration became less complicated over time.

A. Undecorated Nozzle (Nos. 1165–1167)

Undecorated lamps were dated in Jericho to the late 1st century BCE/early 1st century CE (Bar-Nathan 2002:112–113, pl.18:303; 188–190, pl.28:543).

B. Decorated Nozzle (Nos. 1168–1173)

Decorated lamps with simple pair of roulette line and two double circles stamped (nos. 1172–1173) are dated at Jericho to 1st century CE. The less decorated with pair of incised dots across the nozzle (no. 1171) or incised line (nos. 1168–1170) continued to be in use at early 2nd century CE (Bar-Nathan 2002 188–190 pl.28:544–547).

The Herodian lamps were the products of the Judean Jewish inhabitants and were distributed mainly in southern Israel. However, at the same time, the Coastal Plain sites are rich with fragments of Herodian lamps. That tendency is evident in several other Judean groups of pottery vessels found at sites in the Coastal Plain. These vessels belonged to Jewish families that arrived in the region at the end of 1st century BCE (Calderon 2000:103) and settled in Jaffa, Ramat Hanadiv and other coastal sites bringing with them their traditional pottery as well as other cultural heritage.

Date range: late 1st cent. BCE to early 2nd cent. CE

1165 Closed lamp

Reg. No. 79/G/64/028; Area G, Bucket 36

Max h.: 2.8

Arched nozzle. Pink ware (7.5YR7/3), medium fired

1166 Closed lamp

Reg. No. 79/J/70/106; Area J, Bucket 34

Max h.: 2.6

Arched nozzle. Red ware (2.5YR6/6), hard fired.

1167 Closed lamp

Reg. No. 79/X/60/024; Sounding X, Bucket 7

Arched nozzle. Traces of knife shaving and burning on the nozzle. Pink ware (5YR7/4), many minute white grits, hard fired.

1168 Closed lamp

Reg. No. 79/C/61/369; Area C, Sq. DD102, Locus 432, Bucket 592

Rim diam.: 2.6; Max h.: 4

Large circular flat body, arched nozzle, flat base. Light brown ware (7.5YR6/4), hard fired.

1169 Closed lamp

Reg. No. 79/C/61/293; Area C, Bucket 675

Max w.:7.5; Base diam.: 3; Max h.: 2.5

Circular flat body, arched nozzle, flat base. Incised line across the lower nozzle. Very pale brown ware (10YR7/4), medium fired.

1170 Closed lamp

Reg. No. 79/C/65/507; Area C, Sq. CC103, Bucket 923

L.: 9 Max w.:6; Base diam.: 3.6; Max h.: 2.4

Circular flat body, arched nozzle, flat base. Incised line across the lower nozzle. Brown ware (7.5YR5/3) and light brown core (7.5YR6/4), a few small white grits, hard fired.

1171 Closed lamp

Reg. No. 79/C/61/324; Area C, Sq. DD102, Locus 432, Bucket 592

Max h.: 3.2

Circular flat body, arched nozzle, flat base. Pair of incised dots on the nozzle. Reddish-yellow ware (7.5YR7/8) and light brown core (7.5YR6/4), many minute white grits, hard fired.

1172 Closed lamp

Reg. No. 79/D/63/063; Area D, Bucket 36

Max h.: 2

Arched nozzle. Pair of circles and single incised line on the nozzle. Very pale brown core (10YR7/4), black slip, hard fired.

1173 Closed lamp

Reg. No. 79/C/61/323; Area C, Bucket 481

Max h.: 15

Arched nozzle. Pair of circles and single incised line on the nozzle; traces of burning on the nozzle. Pink ware (7.5YR7/4), hard fired.

Miscellaneous

Several unclassified lamps appeared in Area C and probably dated to Roman period according to their shape and ware. Two of these lamps were made of fine thin walled ware. The first one had the typical sunken discus and loop handle and seems parallel to the Corinthian type of lamp (no. 1174). The second was uncovered in an Early/Mid-Roman context (no. 1175). Another two lamps appeared in Area A (nos. 1779–1180), one in Area G (no. 1177), and in Area J (no. 1178).

Date range: Roman

1174 Closed lamp

Reg. No. 79/C/61/295; Area C, Sq. DD100, Bucket 90

Max w.: 11.2; Base diam.: 8; Max h.: 4.2

Large rounded body with broad sunken discus, elevated and grooved loop handle from behind the body to the base. Incised patterns on the rim and base. Dark gray core and wash (10YR4/1), a few small white grits, hard fired.

1175 Closed lamp

Reg. No. 79/C/61/289; Area C, Sq. DD101, Locus 434, Bucket 606

L.: 9.5 Max w.: 9.5; Base diam.: 3.2; Max h.: 2

Circular body with broad sunken discus, small nozzle. Concentric grooves on discus; traces of burning on the nozzle. Very pale brown ware (10YR7/3), soft fired.

1176 Closed lamp

Reg. No. 79/C/61/315; Area C, Sq. CC100, Bucket 466

Max w.: 4.4; Base diam.: 2.5; Max h.: 2

Rounded body. Rosette and lily flowers patterns on the shoulder. Gray ware (5YR5/1) and dark gray slip (5YR4/1), medium fired.

1177 Closed lamp

Reg. No. 79/G/64/037; Area G, Sq. 24, Bucket 73

Max h.: 2.2

Circular body, small rounded nozzle, sunken discus. Concentric grooves on the discus. Pink ware (7.5YR7/4), medium fired.

1178 Closed lamp

Reg. No. 79/J/70/079; Area J, Bucket 27

Max w.: 5.6; Max h.: 4

Double-convex body, small vertical loop handle. Very pale brown ware (10YR7/3), a few small white grits, hard fired.

1179 Closed lamp

Reg. No. 79/A/70/060; Area A, Sq. L3, Bucket 299

Max h.: 3.8

Convex body. reddish-brown ware (5YR7/6) and gray core (5YR5/1), red (2.5YR5/8) and reddish-brown (;2.5YR3/1) wash on the shoulder and nozzle. A few minute black grits, hard fired.

1180 Closed lamp

Reg. No. 79/A/70/064; Area A, Sq. J3, Bucket 81

Max h.: 1.6

Short nozzle, groove around rim. Light gray ware (10YR7/2), many minute black grits, hard fired.

9.10.7. Byzantine Lamps

Slipper Type (Nos. 1181–1182)

Double-convex body with integral nozzle that forms together a slipper-shaped body. Large filling hole surrounded by two ridges, the inner one higher and the outer extending onto the nozzle and forming a palm branch pattern or the pseudo-candlestick decorated nozzle. Raised ring base. The ware is light buff and unslipped. They appeared in two sizes: small (8 cm long) and large (10 cm long).

The nickname “candlestick” was first used by Sellers, who believed that the palm branch pattern referred to the seven-branched menorah (Sellers and Baramki 1953:42–45). On the other hand, the shoulder was decorated with radial sets of molded lines or Greek letters, which were a reference to Christ or the virgin. The contrast between the Jewish menorah and the Christian names on the same lamp was the reason for the rejection of the Jewish interpretation (Kennedy 1963:83).

It was one of the most common and long-lived types of the Byzantine period, particularly throughout southern Israel (Magness 1993). The smaller version appeared in the 4th century and the large one in the 5th–6th century CE (Rosenthal and Sivan 1978:116–118; Kennedy 1963:82–83, Type 17, Nos. 631–640; 83–87, Type 19, pl. XXVI:658–704, PL.XXVII:704). The evidence from the City of David suggests a delay of the large type to the late 6th century CE (Magness 1992a:159, fig. 8:20; p.160, fig. 9:13; p. 165, fig. 12:18–19).

In Jaffa, the larger version appeared exclusively decorated with a palm branch on nozzle and a radiating line on shoulder.

Date range: Byzantine

1181 Closed lamp

Reg. No. 79/C/61/326; Area C, Sq. DD102, Bucket 151

L.: 9.5 Max w.: 6.4; Base diam.: 3.8; Max h.: 3.1

Double-convex slipper shaped body with integral nozzle, wide filling hole surrounded by ridges, the outer is the higher, ring base. Diagonal ridges pattern on the shoulder. Very pale brown ware (10YR7/4) and light brown core (7.5YR6/4), many minute black grits, hard fired.

1182 Closed lamp

Reg. No. 79/C/65/605; Area C, Locus 846

Rim diam.: 2.8; Base diam.: 0; Max h.: 3.1

Double-convex slipper shaped body with integral nozzle, wide filling hole surrounded by ridges, the outer is the higher, ring base. Diagonal ridges pattern on the shoulder. Light brown ware (7.5YR6/4), many minute white grits, hard fired.

9.11. Miscellaneous

9.11.1. Stands

9.11.1.1. Byzantine Stands (Nos. 1183–1185)

Low, concaved wall, thickened on one side which probably served as the base, and flared at top. The standard height was 4–6 cm and maximum diameter was 31 cm. The stands in Jaffa were found exclusively in Area C and were probably connected to the pottery manufacturing center at the site during the Mid-Roman period (Phase 2a).

The stands have a long tradition since the Iron Age. It is not clear enough how the stands functioned and if they were kiln stands used during firing within the kiln or as household stands for rounded bottom vessels (Williams 1989:103: 598–603).

In the Jerusalem manufacturing center at Binyanei ha-Uma, a large assemblage of stands was found connected to the kiln center dated from the mid-1st century BCE to 70 CE (Berlin 2005:45, fig. 11). Berlin believed they served as stands for the completed vessels while they dried out before firing (Berlin 2005:45). Similar stands were found in the Jewish Quarter of Jerusalem (Geva and Rosenthal-Heginbottom 2003:189, pls. 6.3.:18; 6.6:36–37). However, the Jaffa stands were slightly different in shape. Other examples were found at northern Israel Hellenistic levels in Yoqne'am (Avisar 1996:59, fig. X.7:28–29) and Ramat Hanadiv (Silberstein 2000:438, pl VII:10–11). At Anemurium, a large assemblage was found with traces of secondary burning which suggests that they played a role in connection with the kiln. The stands most similar to the Jaffa example were dated to the Late Byzantine period (Williams 1989:103, fig. 63:598).

Date range: late Byzantine

1183 Stand

Reg. No. 79/C/61/422; Area C, Sq. DD102, Locus 432, Bucket 594

Rim diam.: 12.5; Base diam.: 13; Max h.: 10.8

Slightly flaring rounded rim, tall and narrow cylindrical open-ended body, the lower part is slightly wider. Pink ware (7.5YR7/4) and pale brown core (10YR6/3), many small white grits, hard fired.

1184 Stand

Reg. No. C/65/636; Area C, Bucket 761

Rim diam.: 29; Base diam.: 30; Max h.: 4

Concaved wall with uprising edges. Light reddish-brown ware (5YR6/4), many large and small white grits and small black grits, hard fired.

1185 Stand

Reg. No. 79/C/65/601; Area C, Sq. DD103, Locus 441, Bucket 860

Rim diam.: 31.2; Base diam.: 31; Max h.: 6.2

Concaved wall with uprising edges. Light brown ware (7.5YR6/4), many large white and black grits, hard fired.

9.11.1.2. High Stands (No. 1186)

High cylindrical walls slightly ribbed on internal side. Their shape resembled clay pipes and could have been part of the kiln furniture. The single example in Jaffa was exposed in Area C where a pottery manufacturing center existed during the Mid-Roman period.

Many similar stands with a great variation of size and heights were recovered in Israel. The higher stands were exposed in Persian contexts in Dor (Stern 1995:68, fig. 2.15:2–3), and Samaria (Crowfoot et al 1957:183–5, fig.28:9–11), and were the most similar to the Jaffa example. At Mevorakh (Stern 1978:36, fig.8:22) and Maresha (Levine 2003:98, fig. 6.8:84) the type was slightly lower and dated to the Hellenistic period. However, it is impossible to determine whether the Jaffa stand was connected to the Roman kiln in Area C or to the Persian level which was not exposed during the Kaplan excavations in Area C.

Date range: Persian–Hellenistic

1186 Stand

Reg. No. C/61/B208.1; Area C, Sq. DD100, Locus 414, Bucket 208

Rim diam.: 13.5; Max h.: 4

Concaved wall with up-raised edges.

9.11.2. Braziers (Nos. 1187–1190)

A fragment of a satyr head rises from the inner face of a rectangular lug. The satyr is decorated with streaming hair, pointed ears and jutting beard. The latter was intended to support the cooking pot over the fire bowl (Crowfoot et al 1957: 271 fig. 60).

The brazier was commonly found in the Hellenistic world as a private household utensil for cooking or heating and keeping the feet warm (Rahmani 1984:230). The 23 braziers from sites in Israel's coastal plain were analyzed by Neutron activation analysis in order to learn about their place of origin (Gunneveg and Perlman 1983:232–238). One example from Jaffa was included in the pottery analysis (no. 1187) (Rahmani 1984:no 17). Others were found at Akko, Caesarea, Ashkelon, the Gaza shore, Ashdod and Dor (Rahmani 1984:225–230, nos 1–27). According to the analysis, most of the brazier origins were from abroad, such as Athens, Delos, Asia Minor, or Rhodes (Rahmani 1984:230 no.37).

The brazier was quite popular at coastal sites and rare at Hellenistic inland sites due to the fact they reached Israel as merchandise (Rahmani 1984:231). The braziers are dated to the 2nd half of the 2nd century BCE.

Date range: 2nd half of the 2nd cent. BCE

1187 Brazier

Reg. No. 79/A/56/262; Area A

Rim diam.: 30; Max h.: 12

Lug with part of rim. on lug- bearded head. The hair shaped as arches, set in a raised panel with double frame.

1188 Brazier

Reg. No. 7/A/56/300; Area A

Lug.

1189 Brazier

Reg. No. 79/A/56/302; Area A

Max h.: 6

Lug with lower part of bearded head.

Many small white and black grits, hard fired.

1190 Brazier

Reg. No. C/61/545; Area C, Sq. DD102, Locus 545

Max h.: 7.5

Egg-and-dart pattern.

Many medium gold mica, medium fired.

9.11.3. Kiln Fragments (Nos. 1191–1192)

1191 Kiln fragment

Reg. No. 79/C/65/550; Area C, Sq. CC103, Bucket 928

Max h.: 11

Flattened rim wavy on inner face, wall fragment, horizontal handle with dent at one end. Wavy pattern on rim interior(?). A few small white and black grits, hard fired.

1192 Kiln fragment

Reg. No. 79/C/65/554; Area C

Diam. max: 15

Very porous ware. Many small and medium white grits, medium fired.

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TABLE AND PERSONAL VESSELS

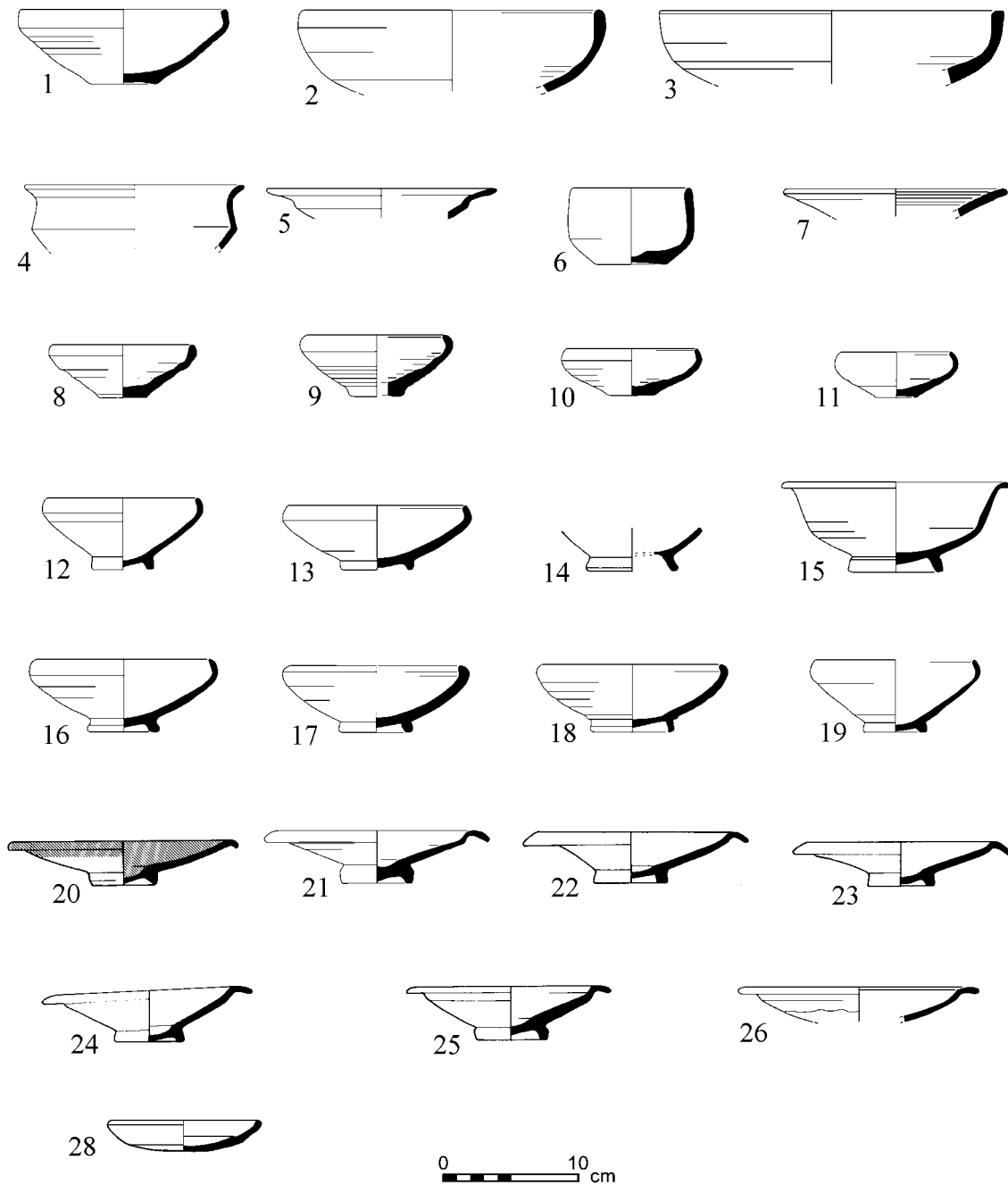


Figure 9.1. Persian (1–7) and Hellenistic Bowls and Plates (8–28).

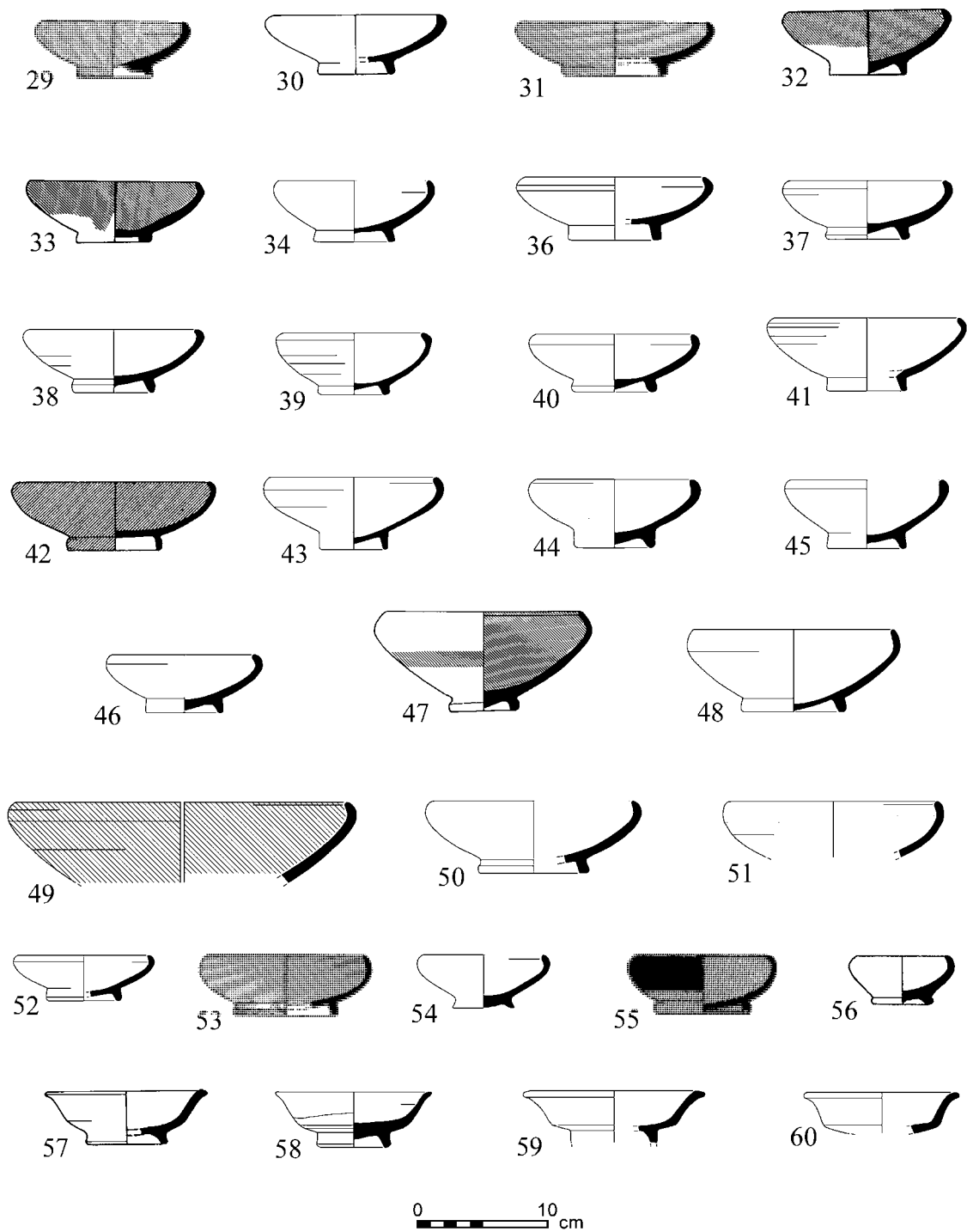


Figure 9.2. Local Red Slip Bowls and Plates (29–60).

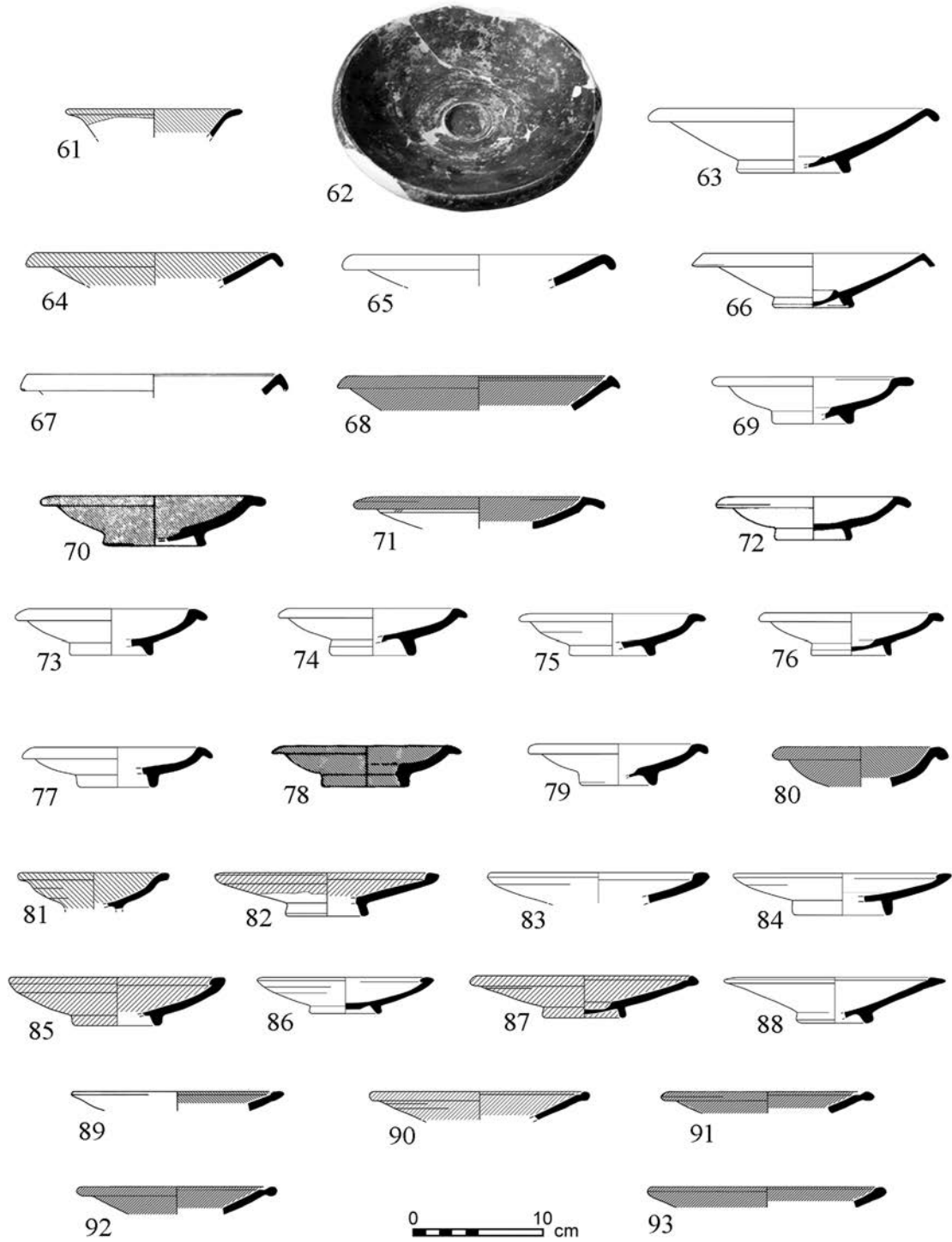


Figure 9.3. Local Red Slip Bowls and Plates (61–93).

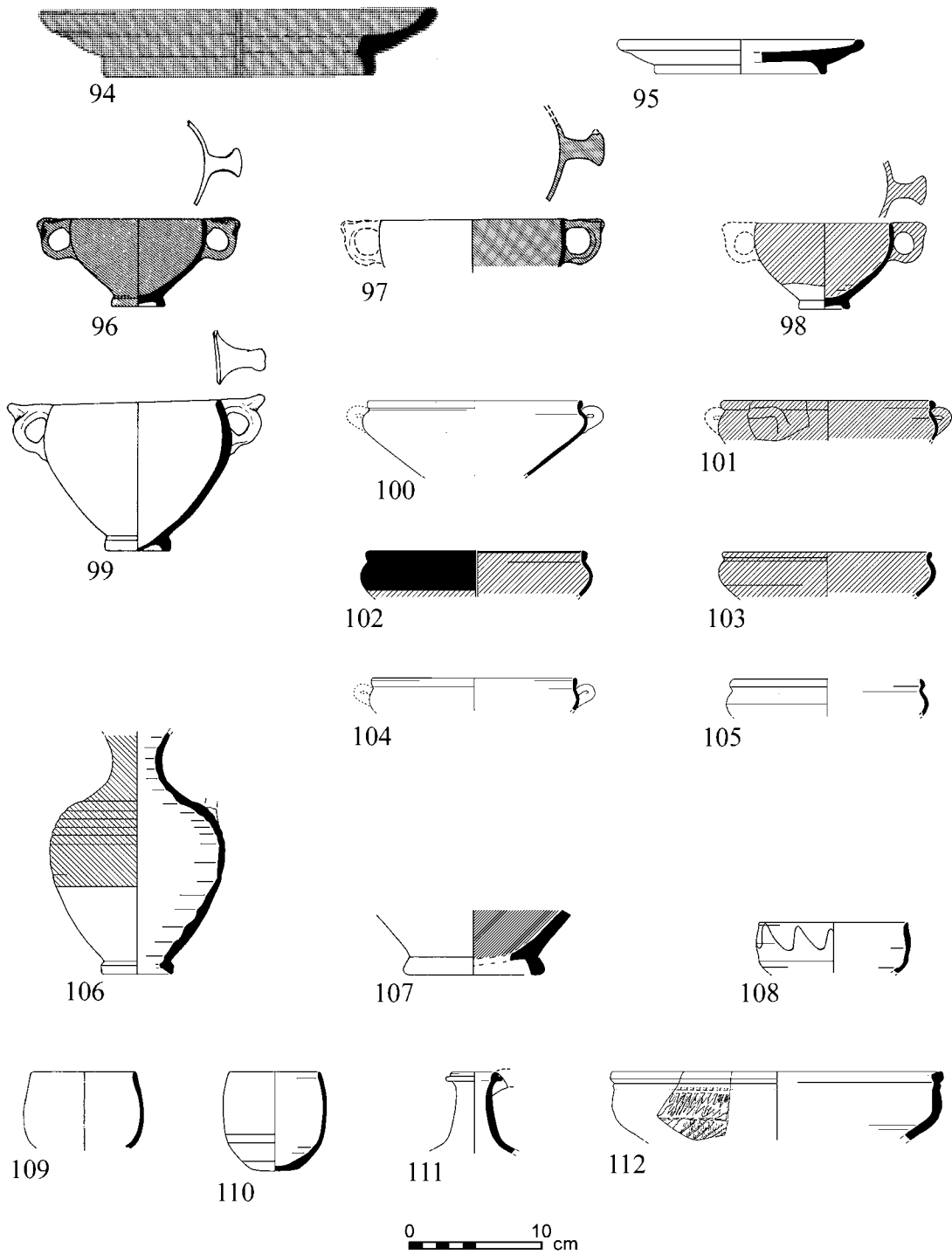


Figure 9.4. Local Red Slip Bowls, Plates and Jug (94–107), Fine Byzantine Bowls (108–112).

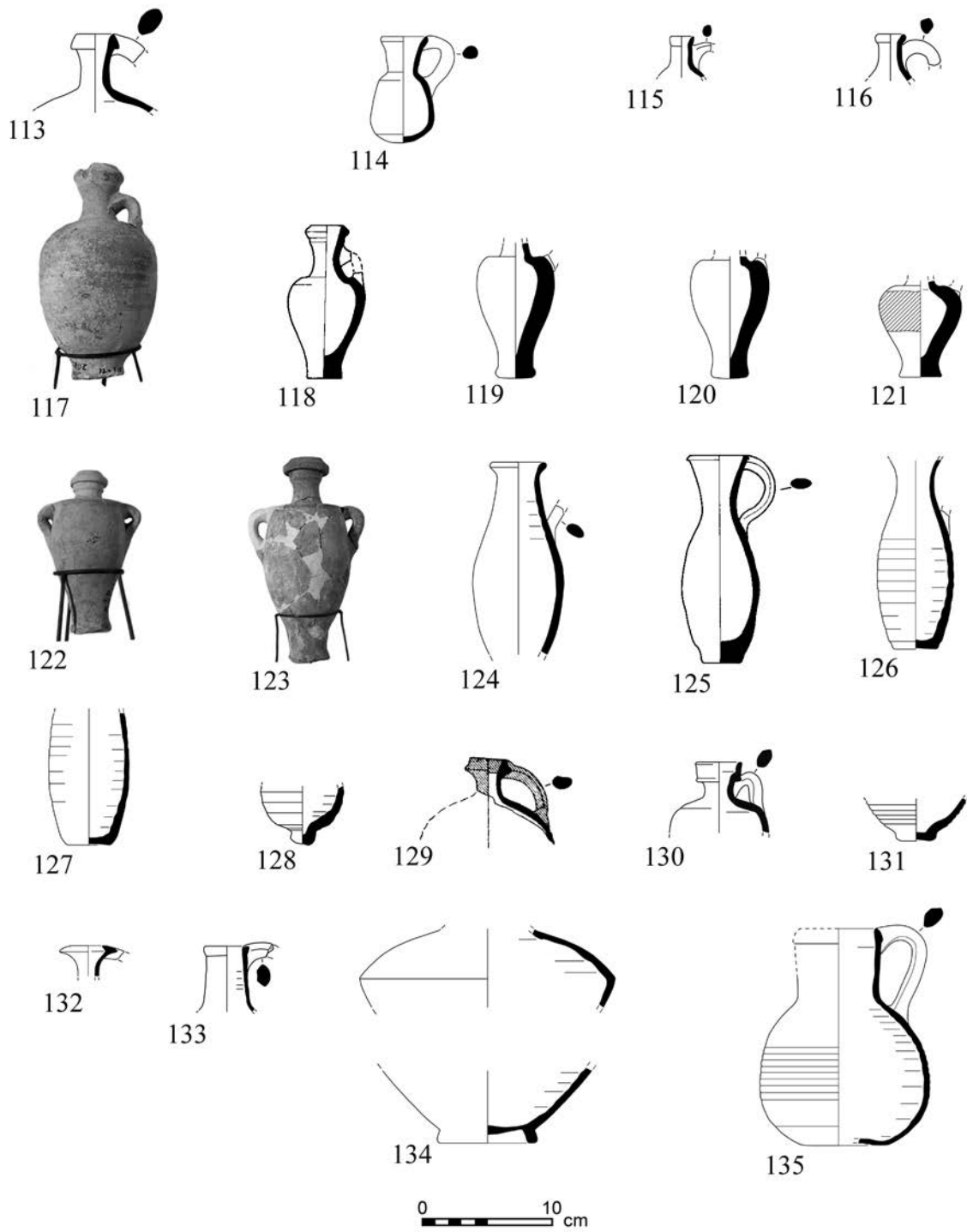


Figure 9.5. Persian Juglets (113–127), Hellenistic, Early Roman and Roman Juglets and Jugs (128–135).

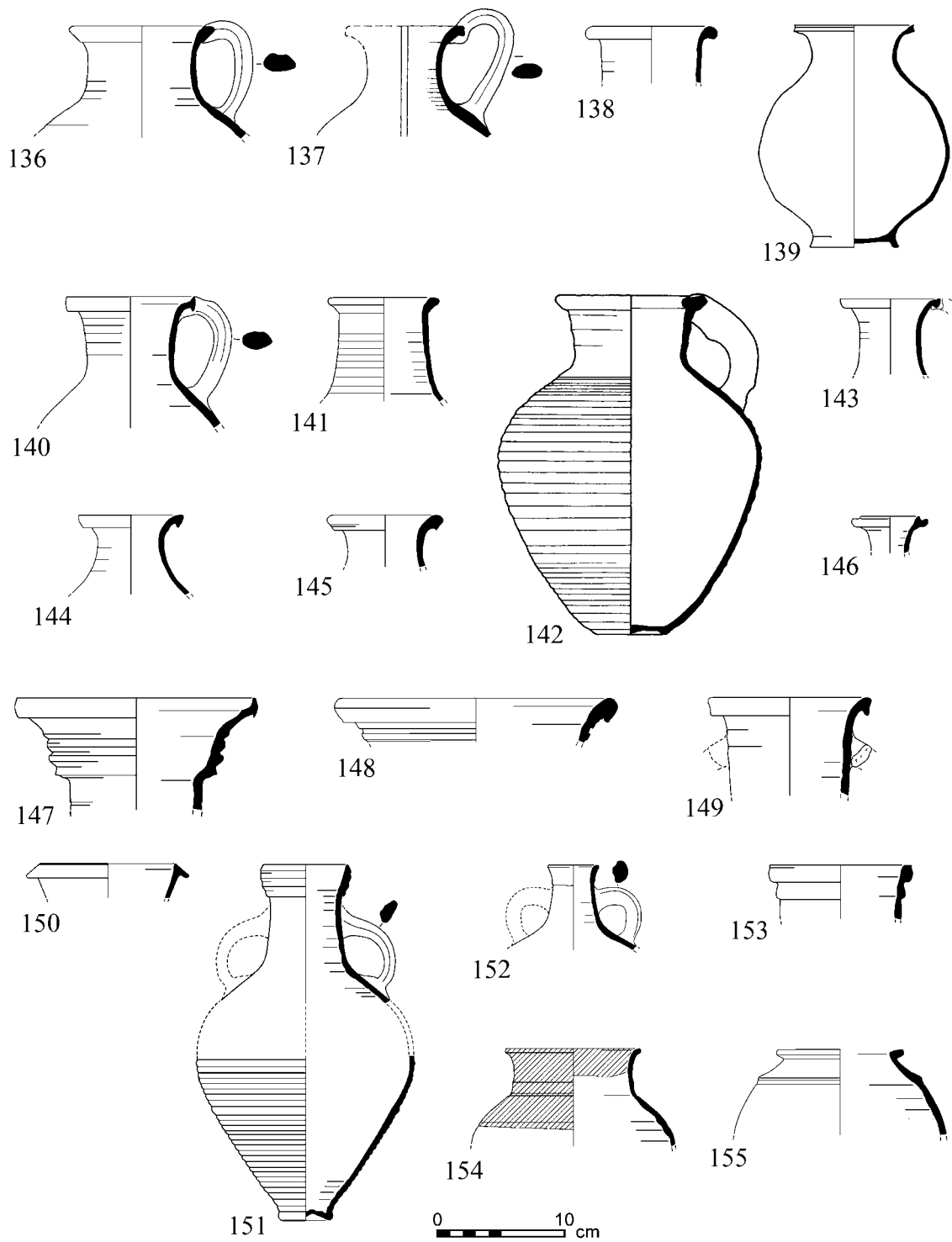


Figure 9.6. Roman Jugs (136–155).

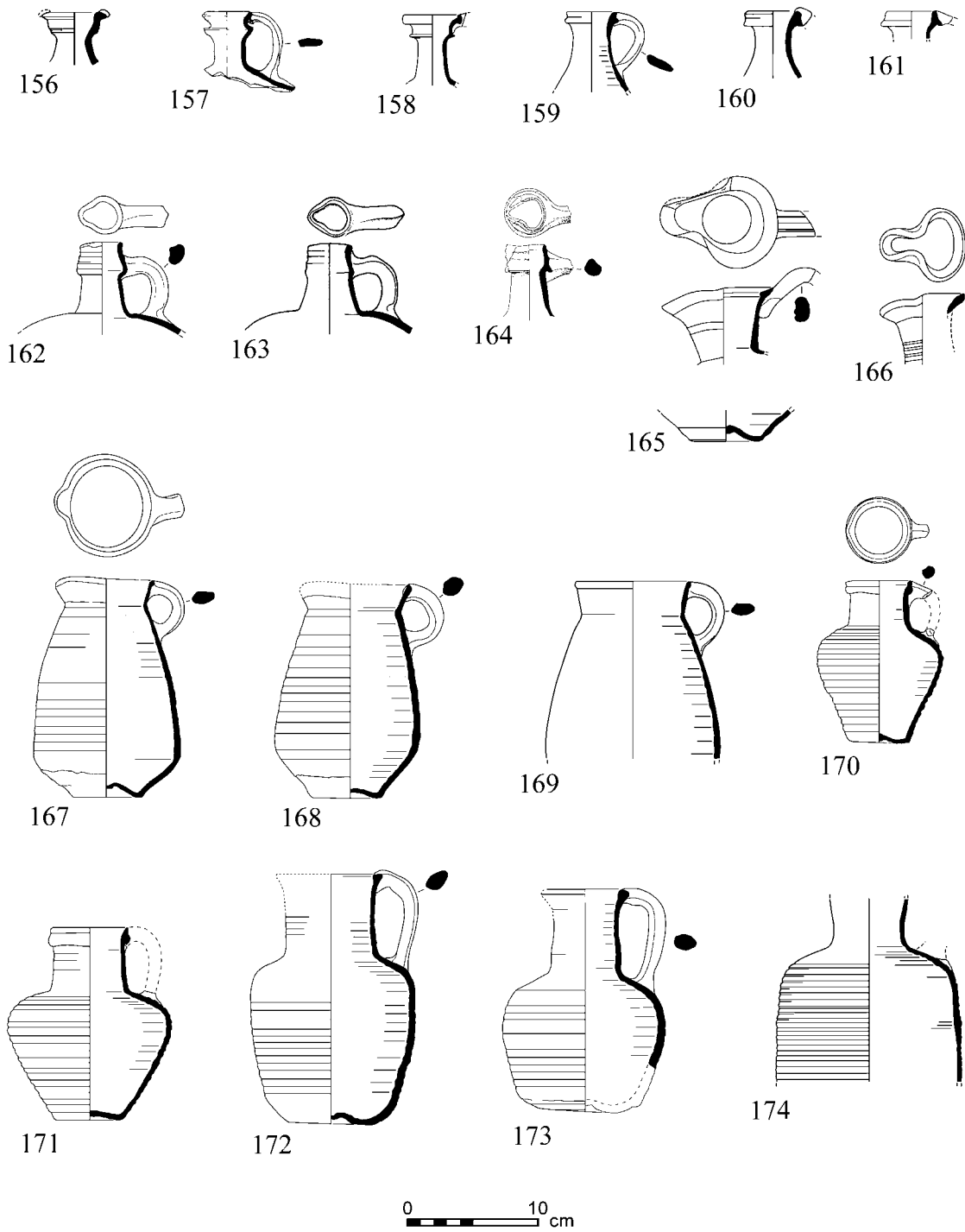


Figure 9.7. Hellenistic, Roman and Byzantine Jugs (156–174).

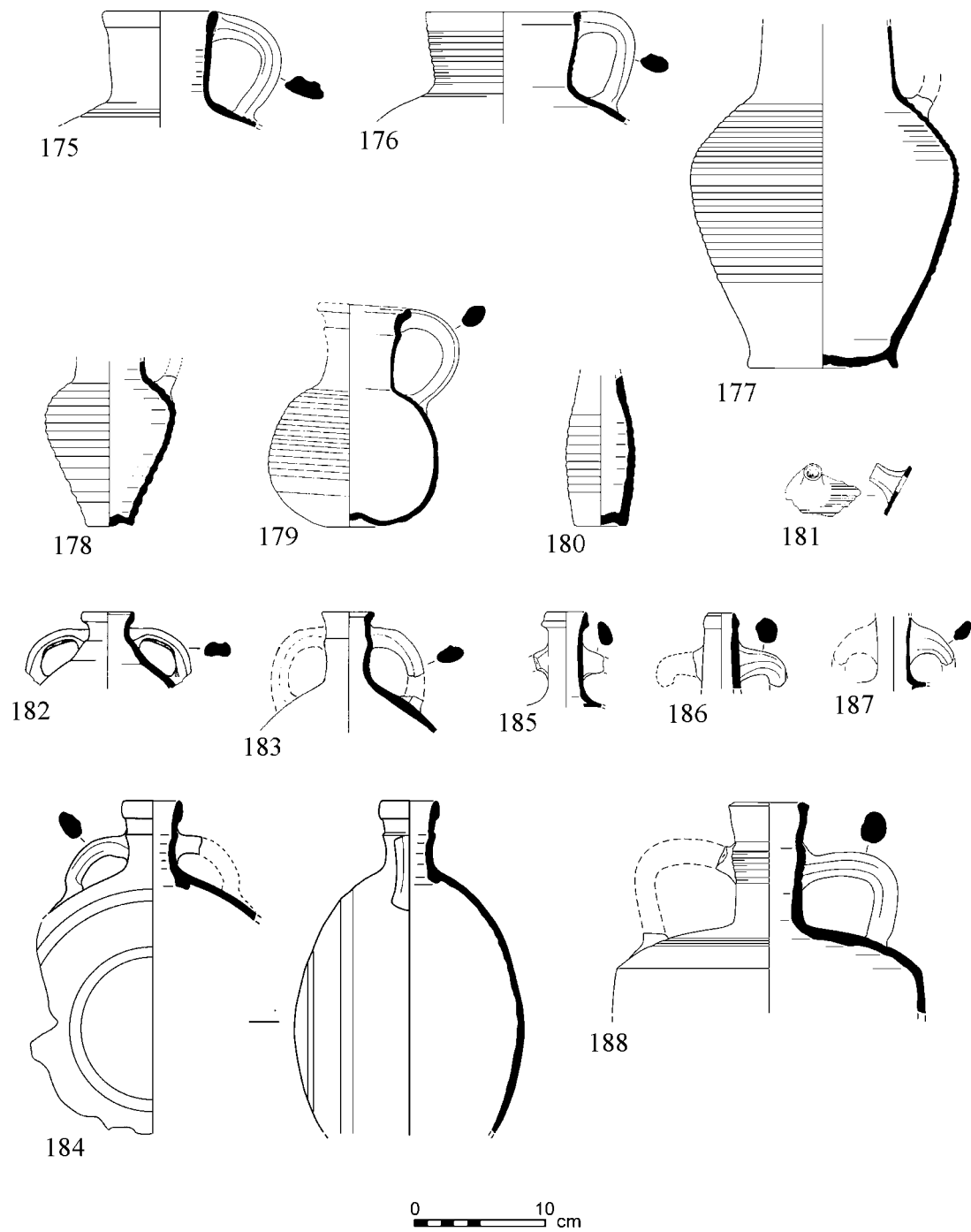


Figure 9.8. Byzantine Jugs (175–181), Persian to Byzantine Flasks (182–188).

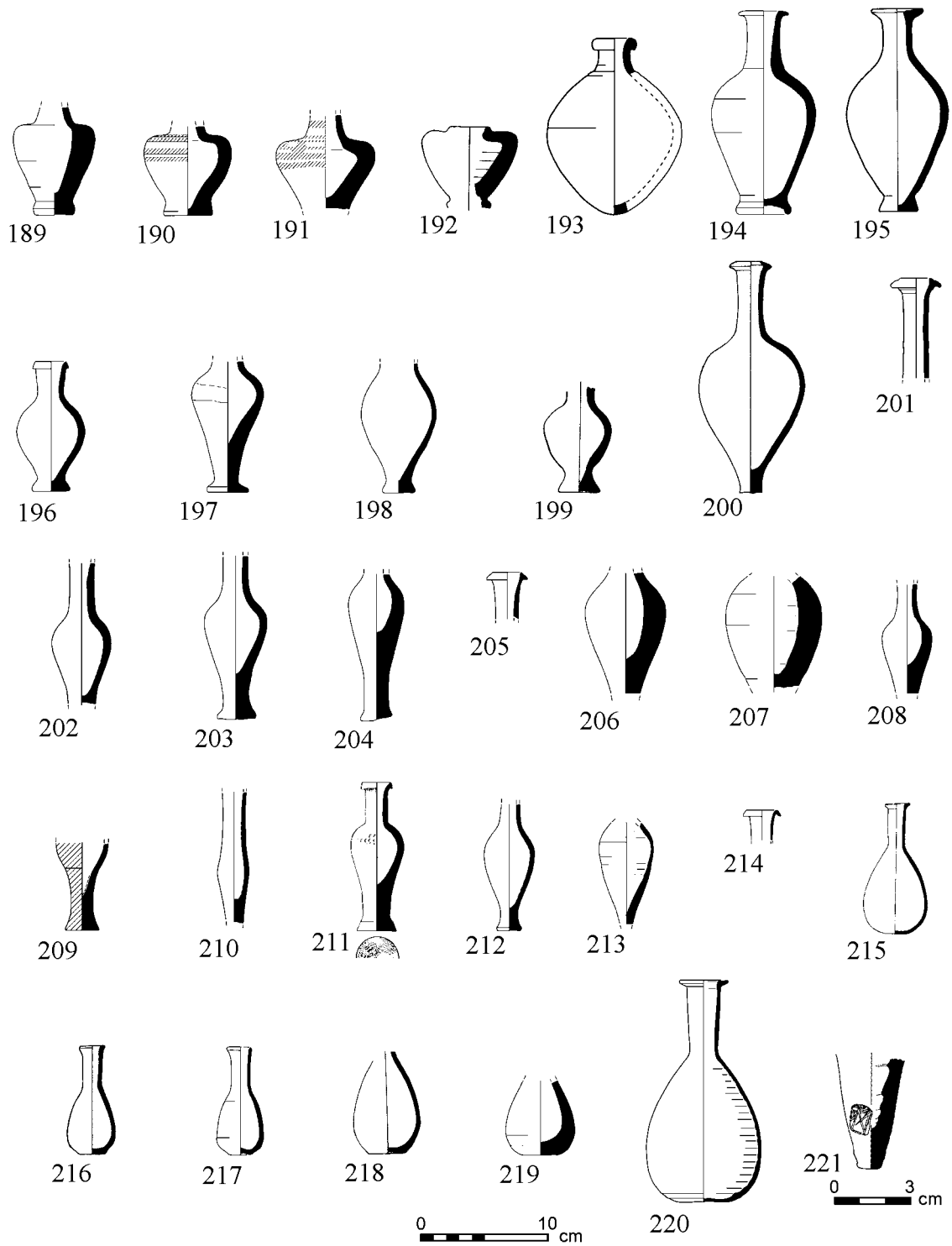


Figure 9.9. Persian, Hellenistic, Roman and Byzantine Bottles (189–221).

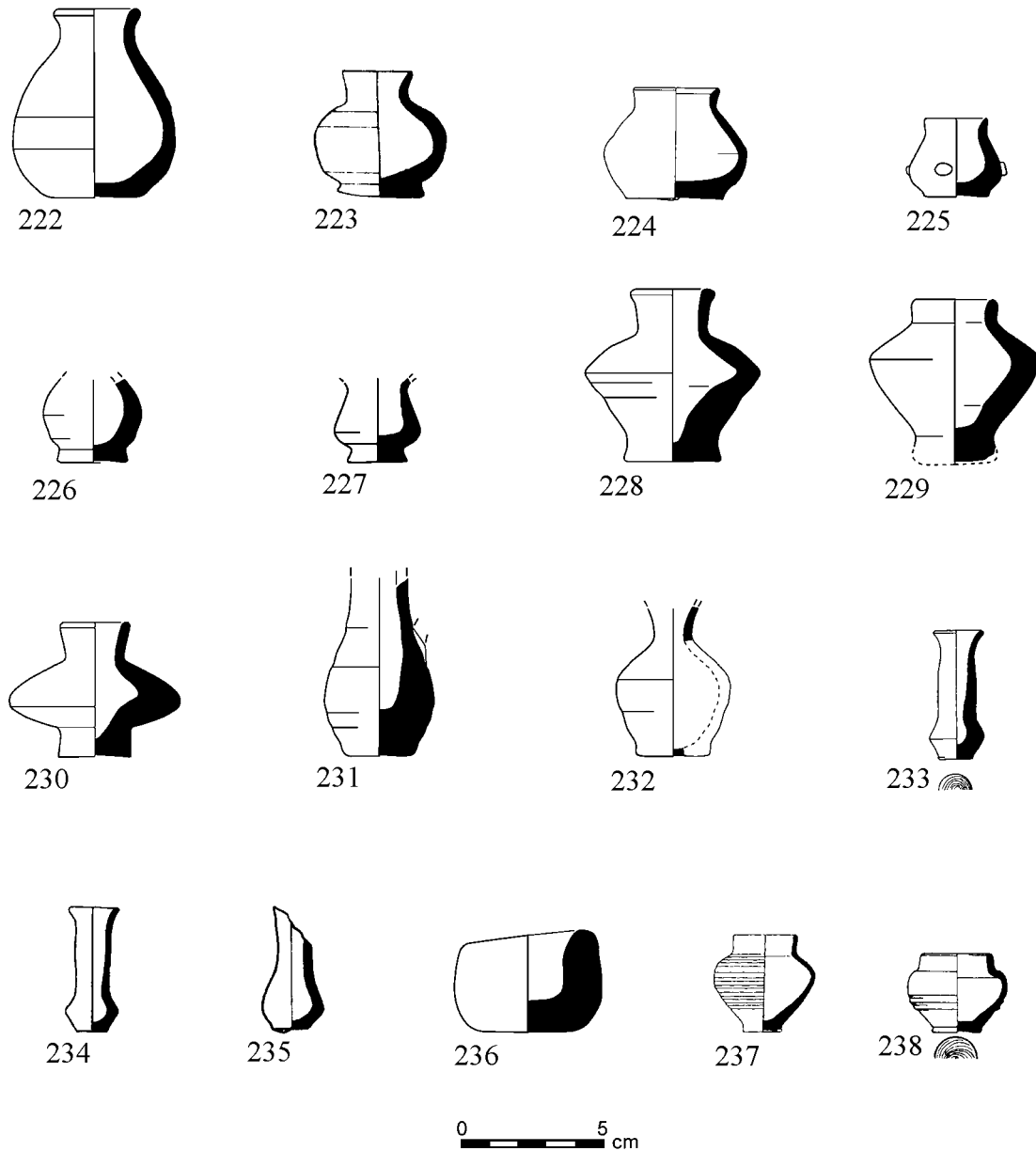


Figure 9.10. Ointment Vessels (222–238).

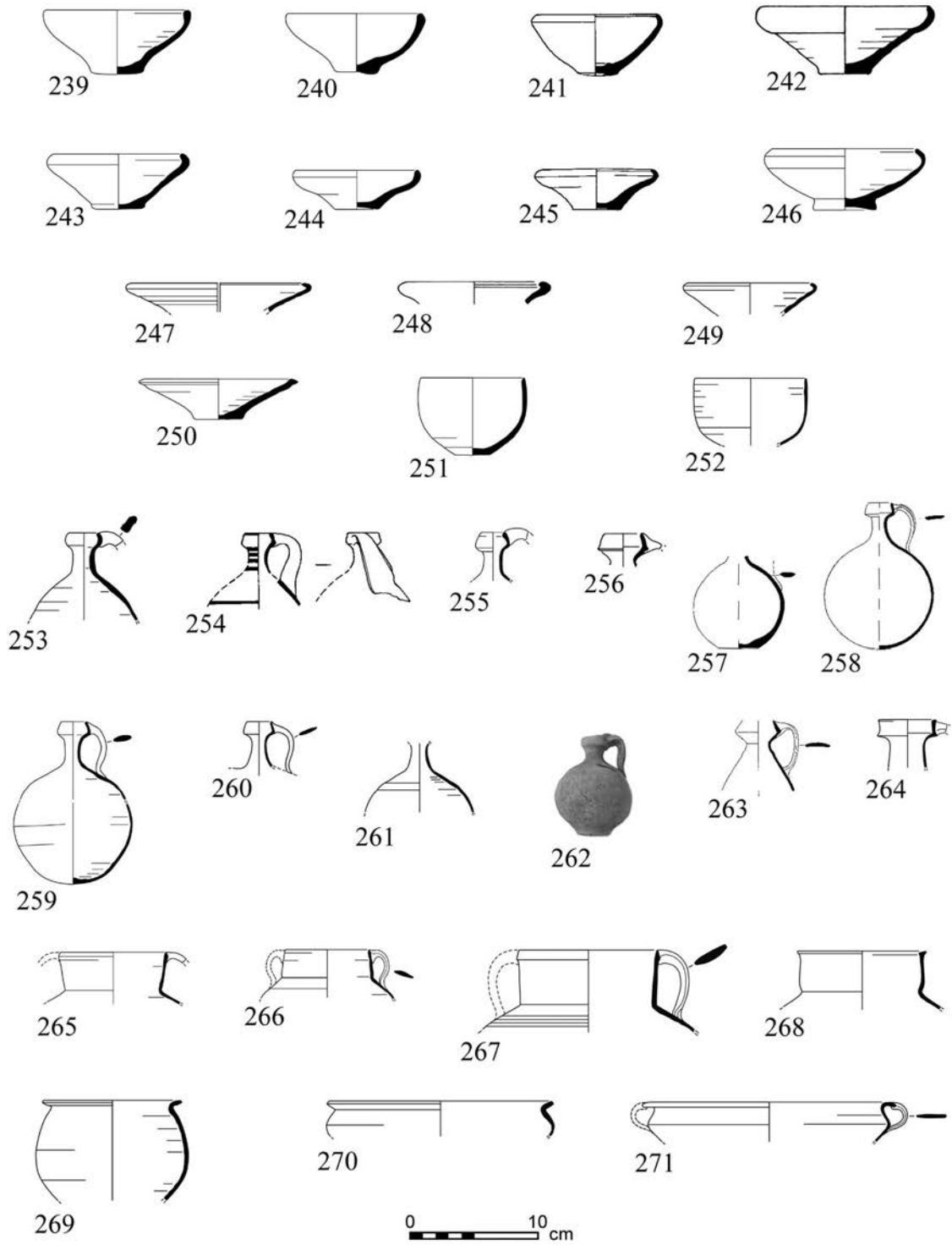


Figure 9.11. Local Judean Ware (239–271).

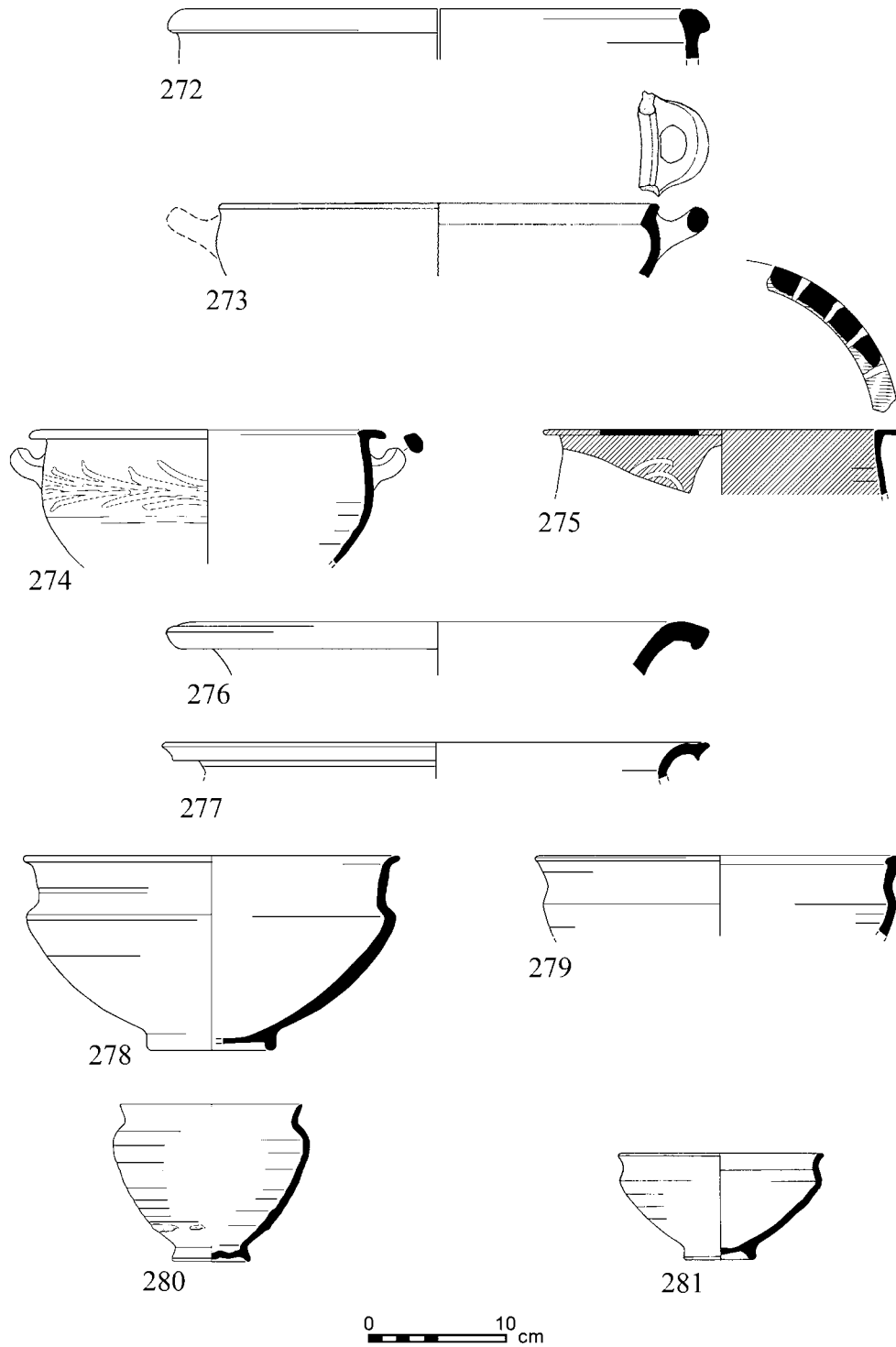


Figure 9.12. Persian and Hellenistic Kraters (272–281).

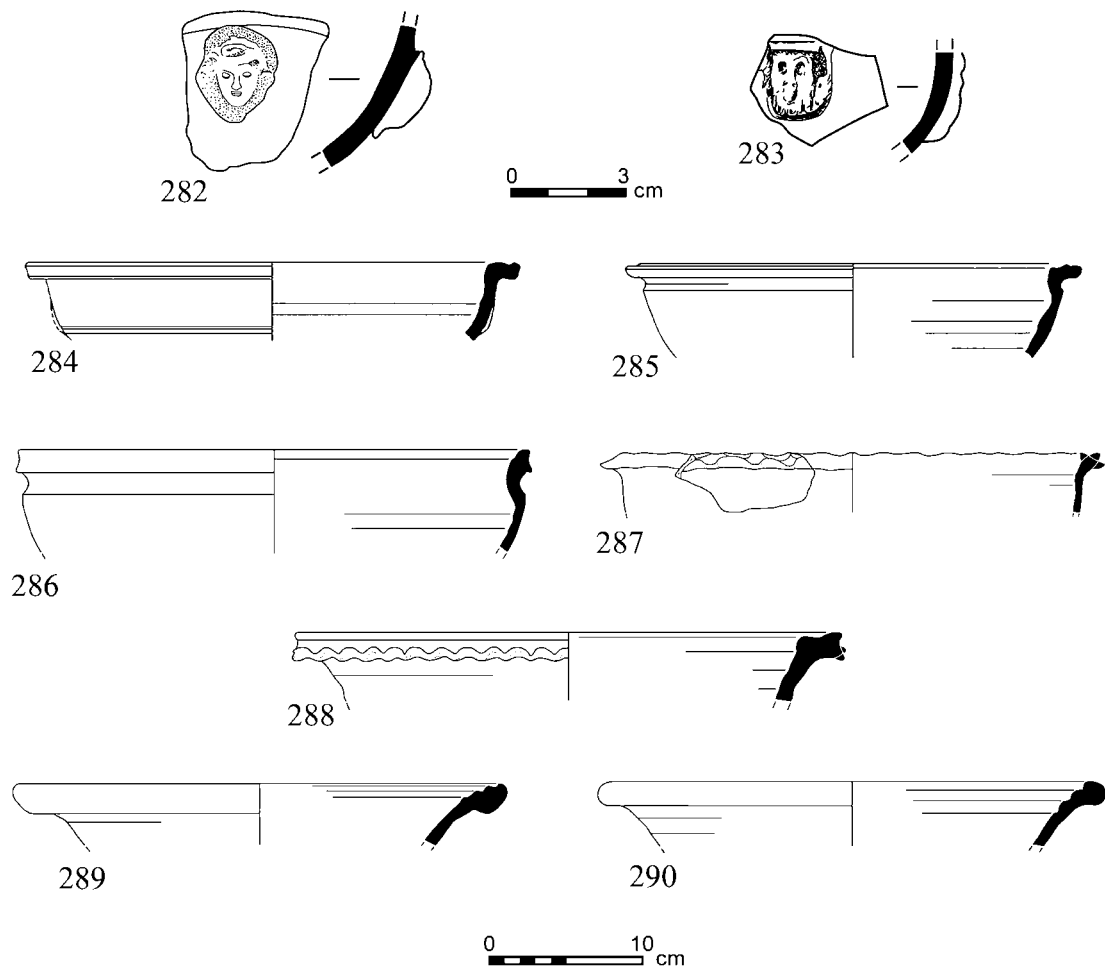


Figure 9.13. Hellenistic and Roman Kraters (282–290).

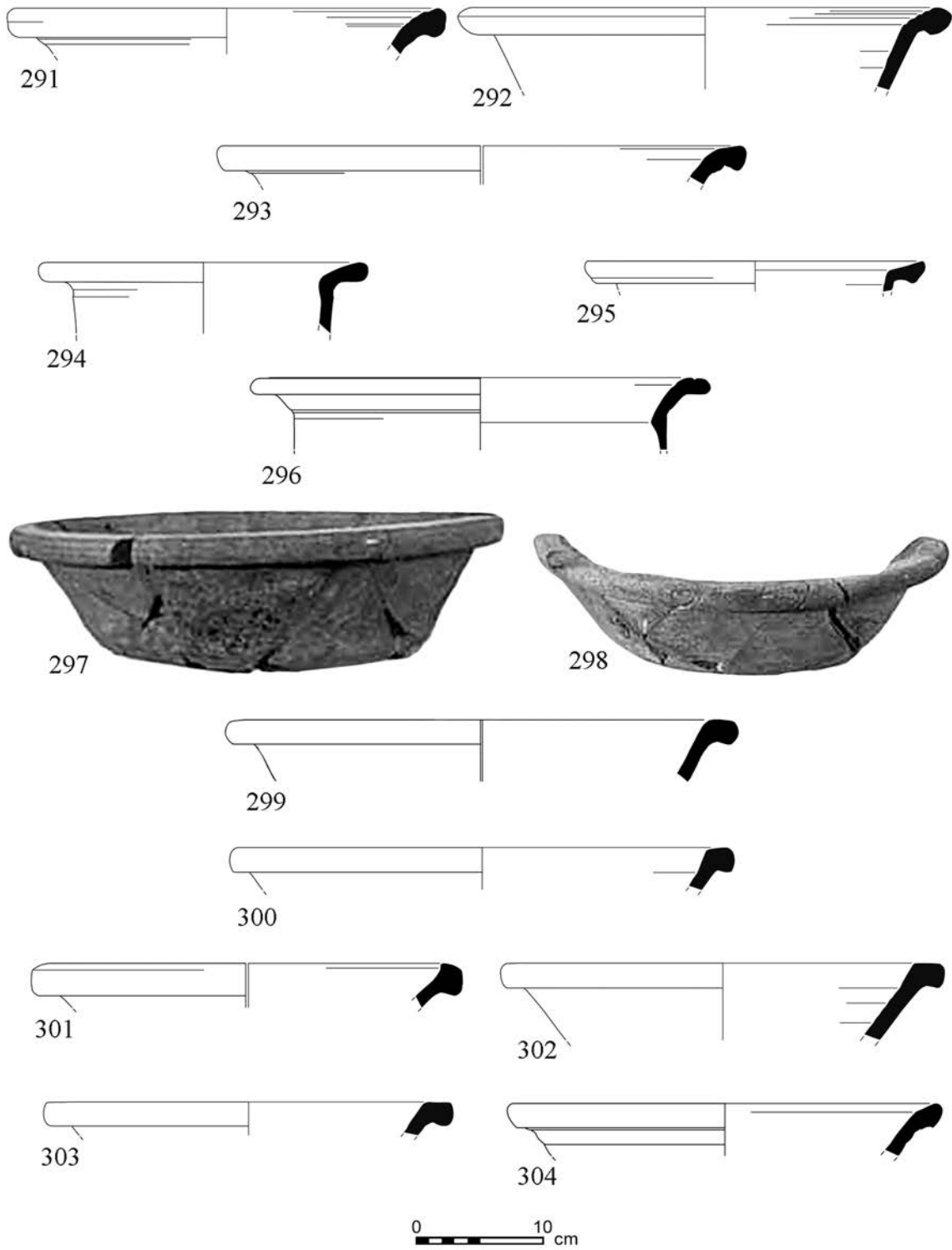


Figure 9.14. Roman Basins (291–304).

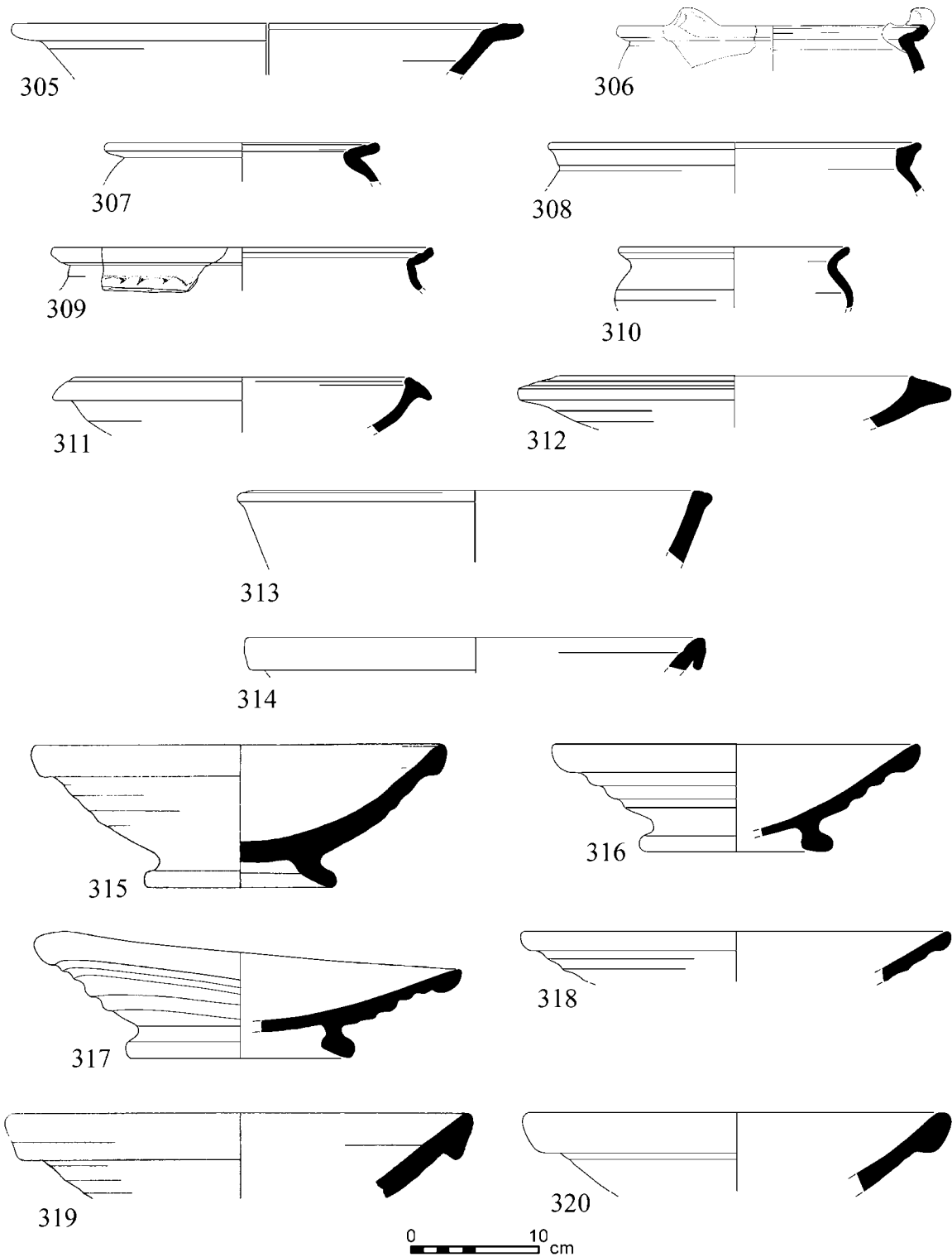


Figure 9.15. Roman Basins (305–314), Persian Mortaria (315–320).

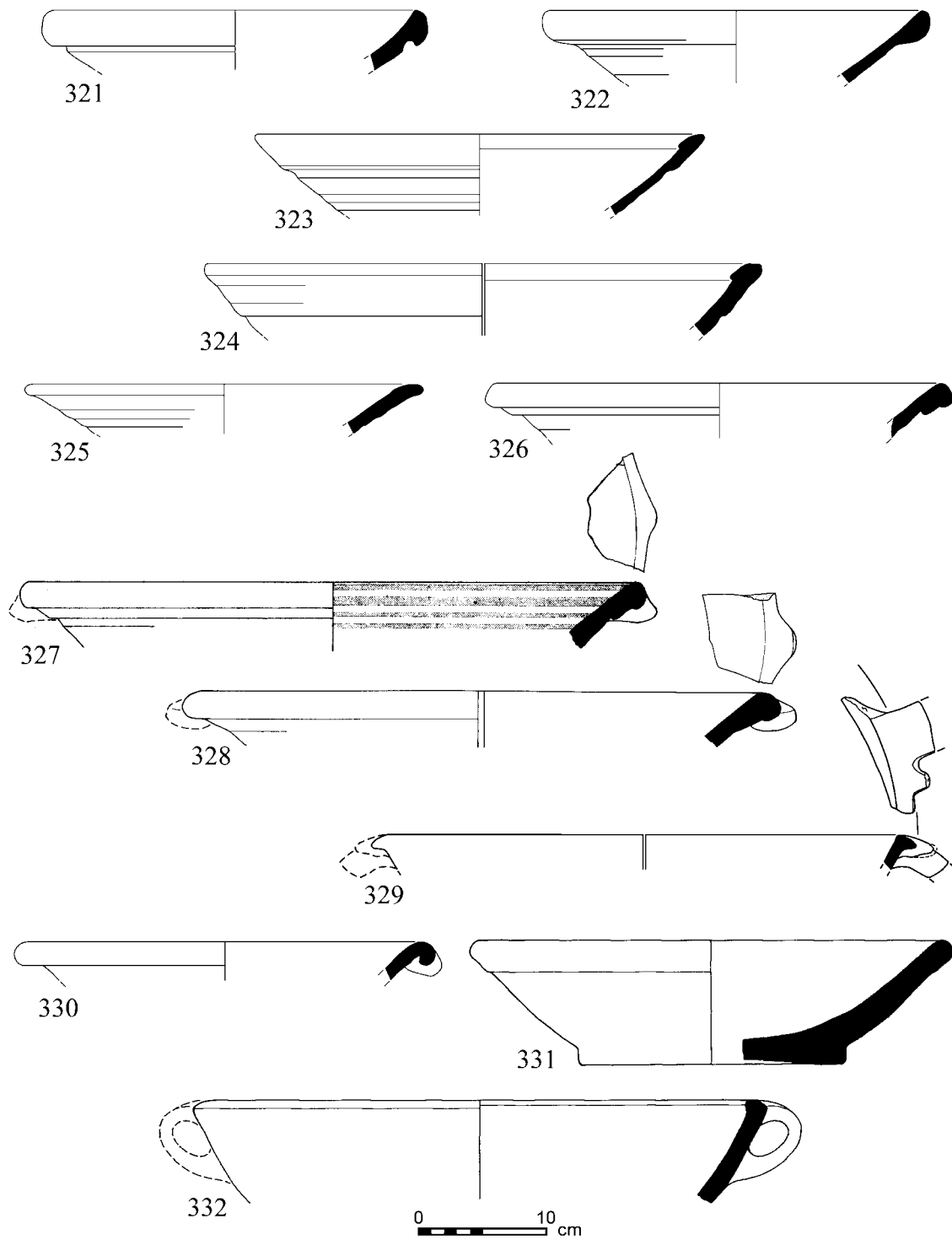


Figure 9.16. Persian Mortaria (321–330), Hellenistic Mortaria (331–332).

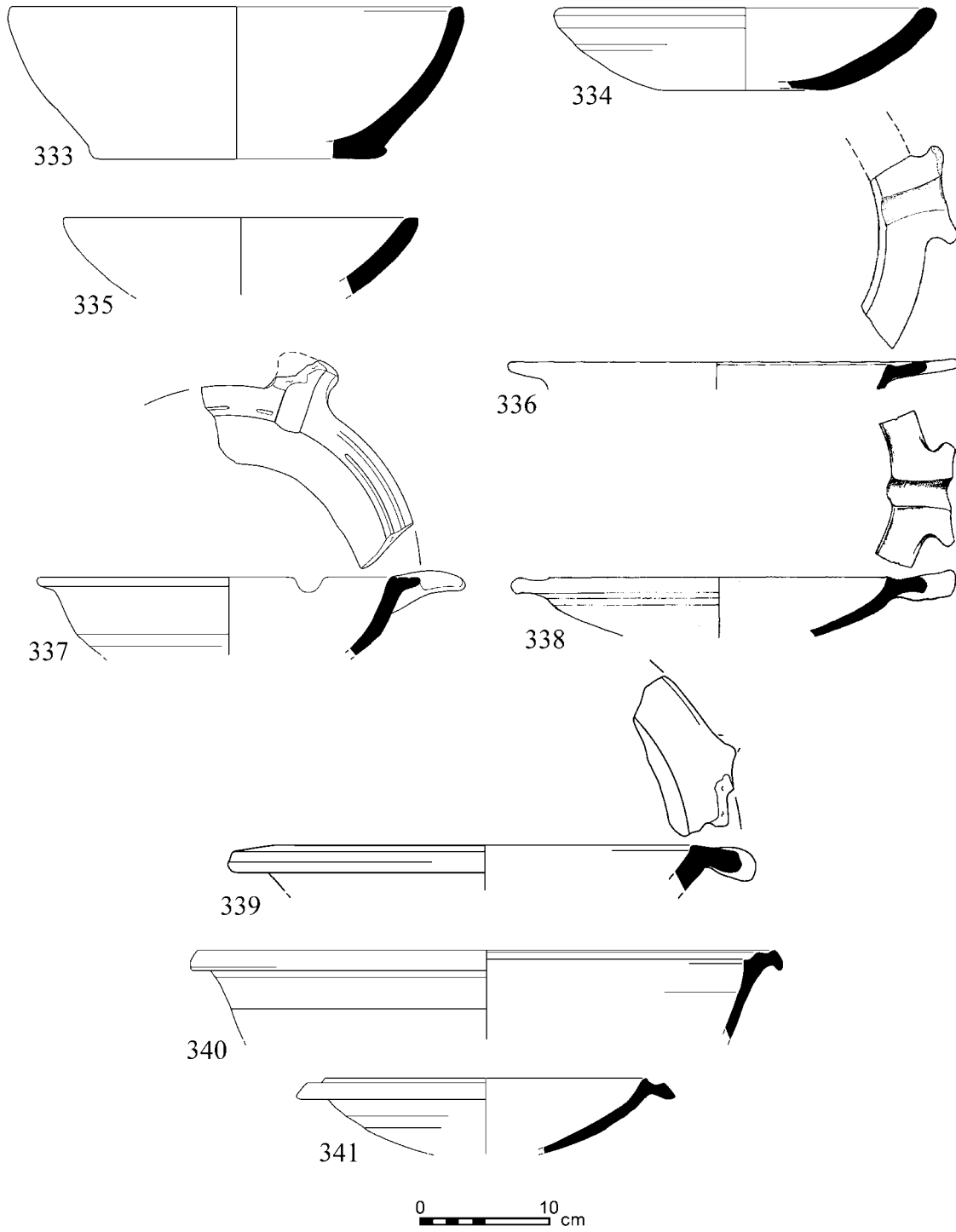


Figure 9.17. Hellenistic Mortaria (333–340), Early Roman Mortaria (341).

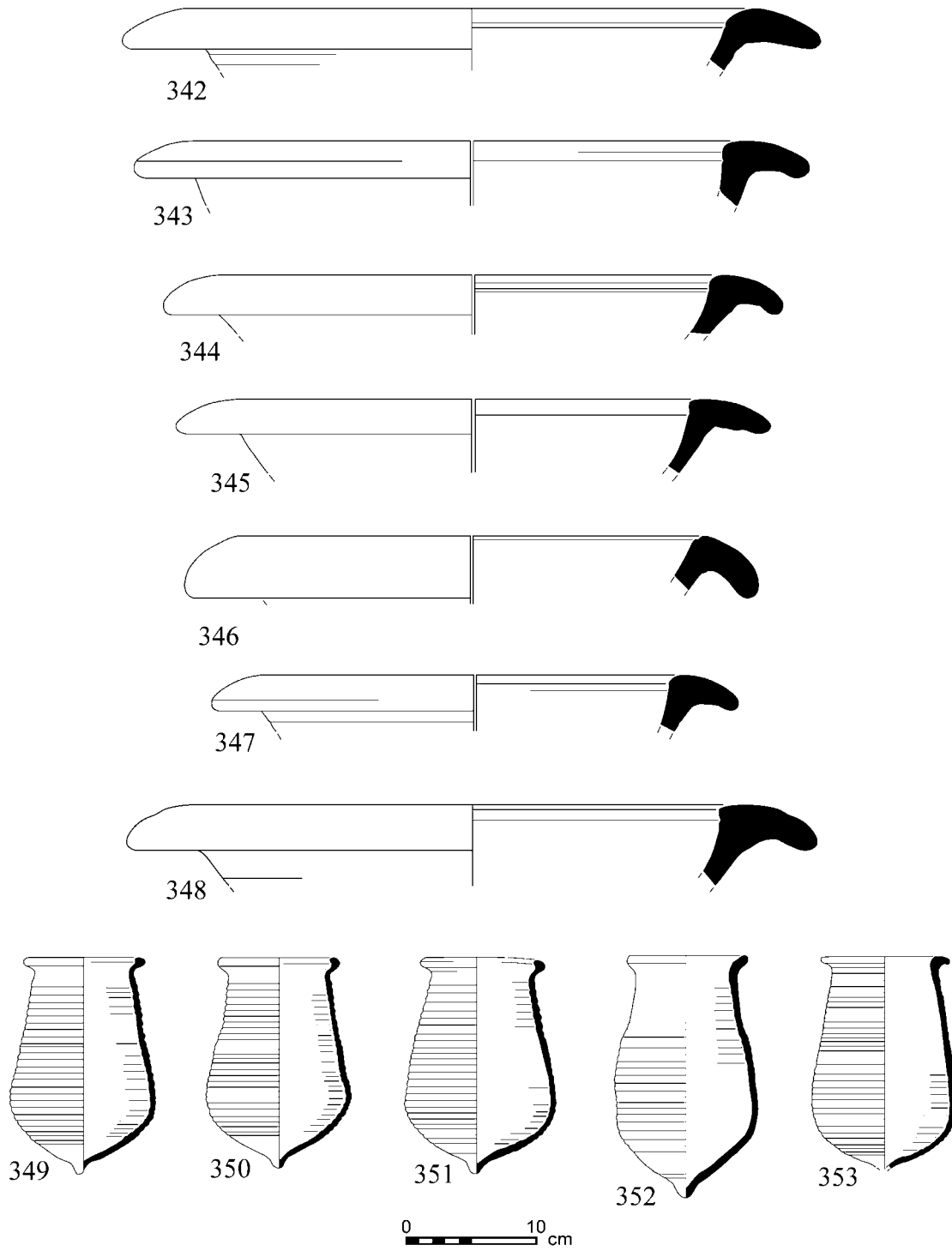


Figure 9.18. Late Roman Mortaria (342–348), Byzantine Anitlia (349–353).

UTILITY AND COOKING VESSELS

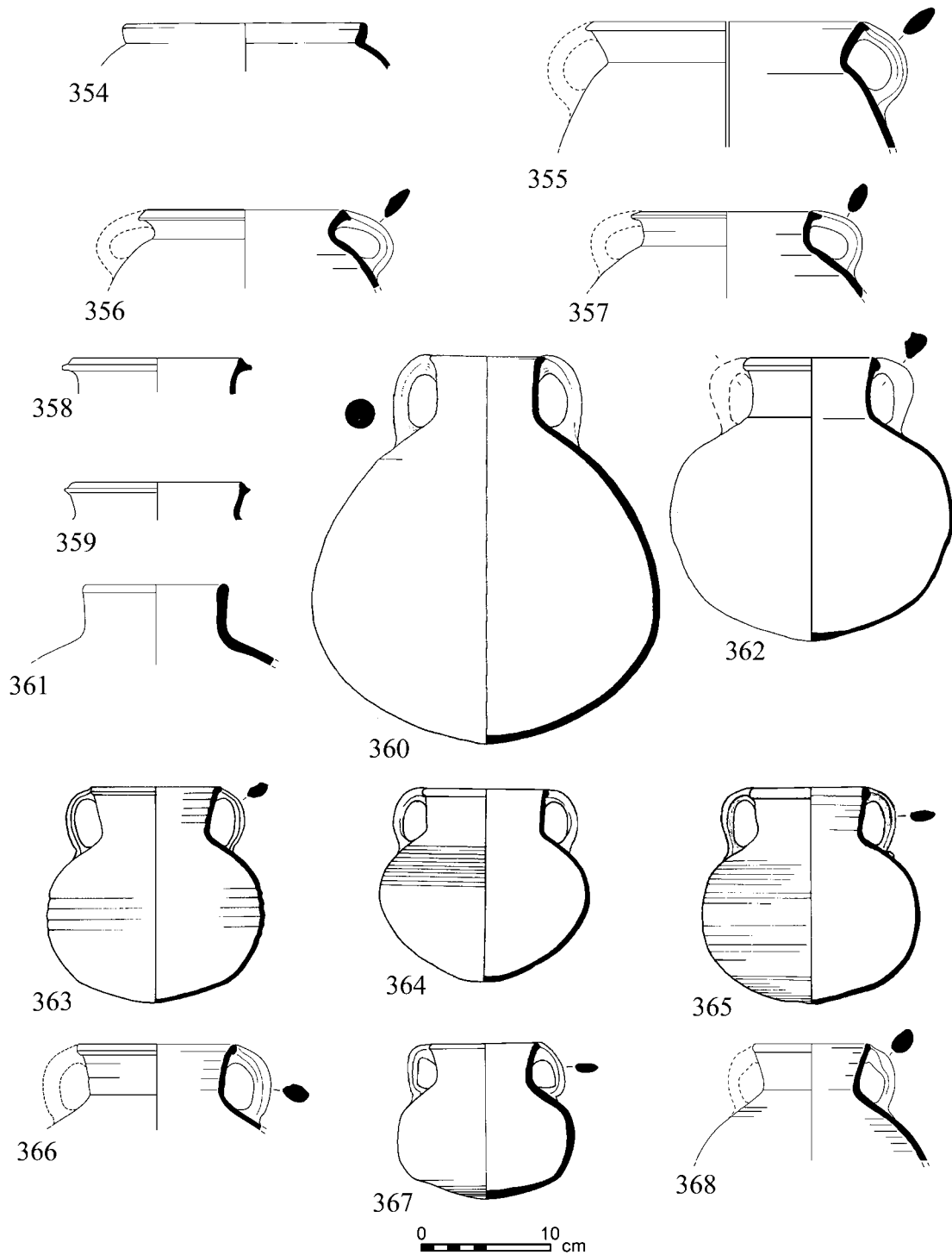


Figure 9.19. Persian Cooking Pots (354–359), Hellenistic Cooking Pots (360–368).

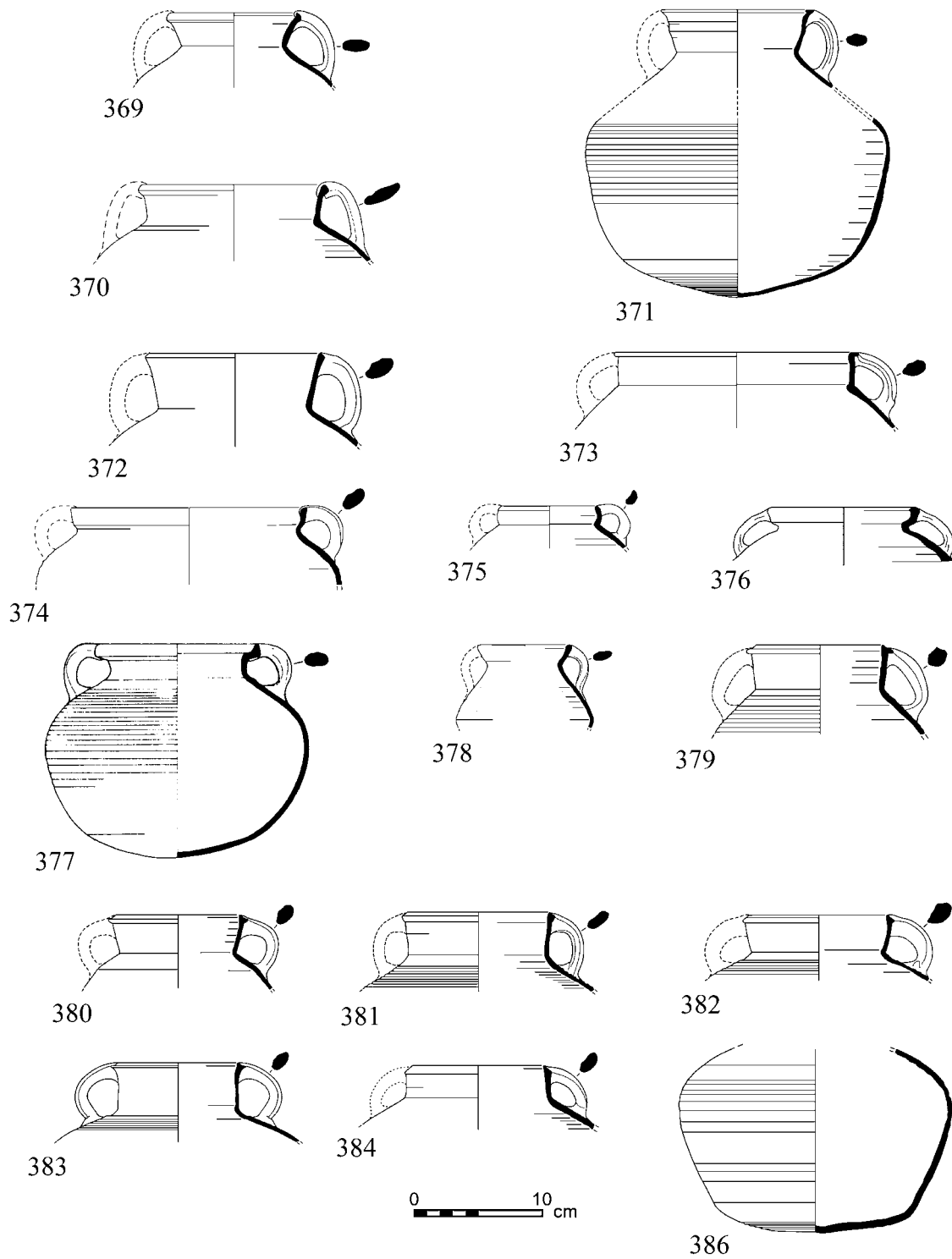


Figure 9.20. Hellenistic Cooking Pots (369–378), Early Roman Pots (379–386).

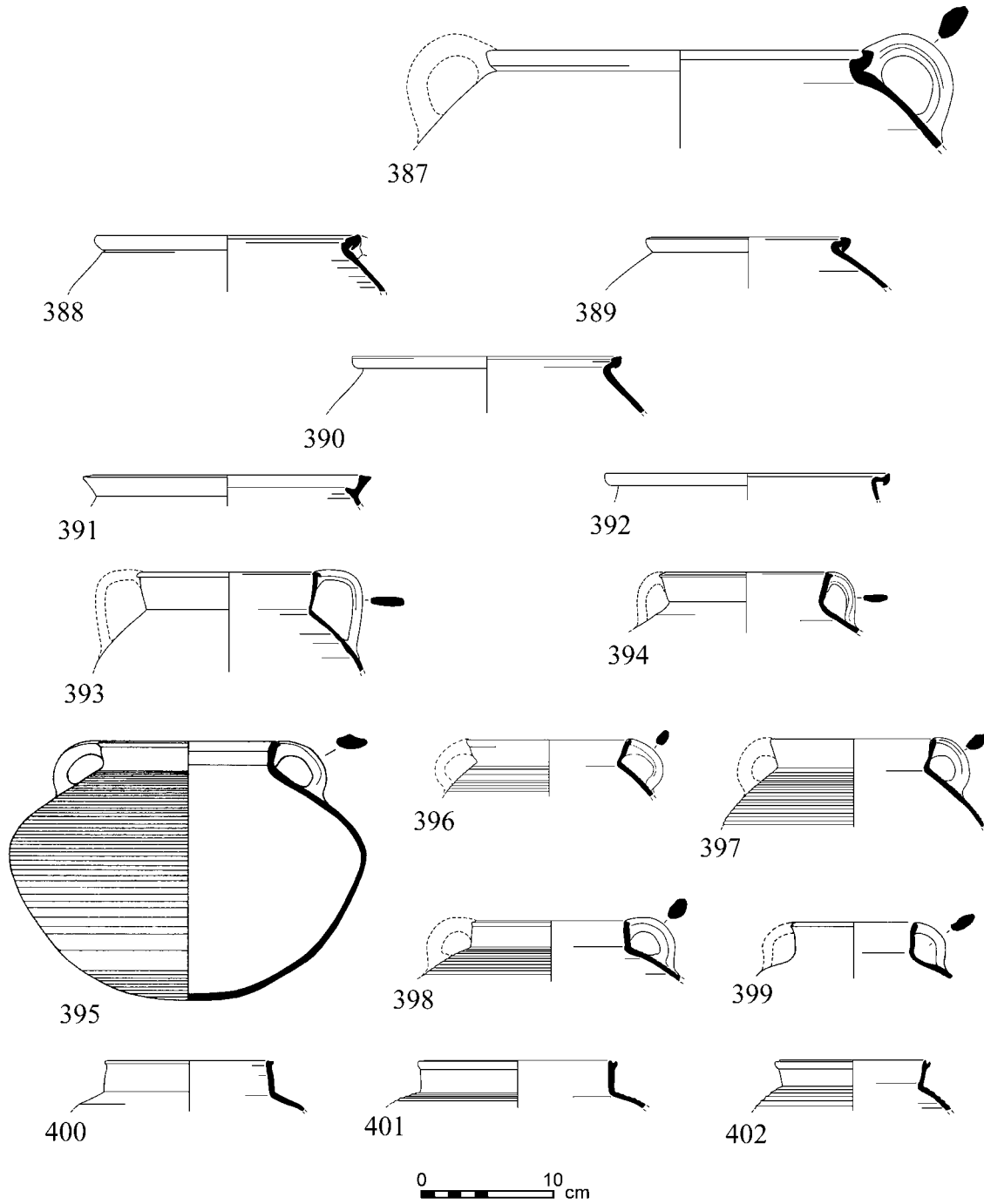


Figure 9.21. Roman Cooking Pots (387–402).

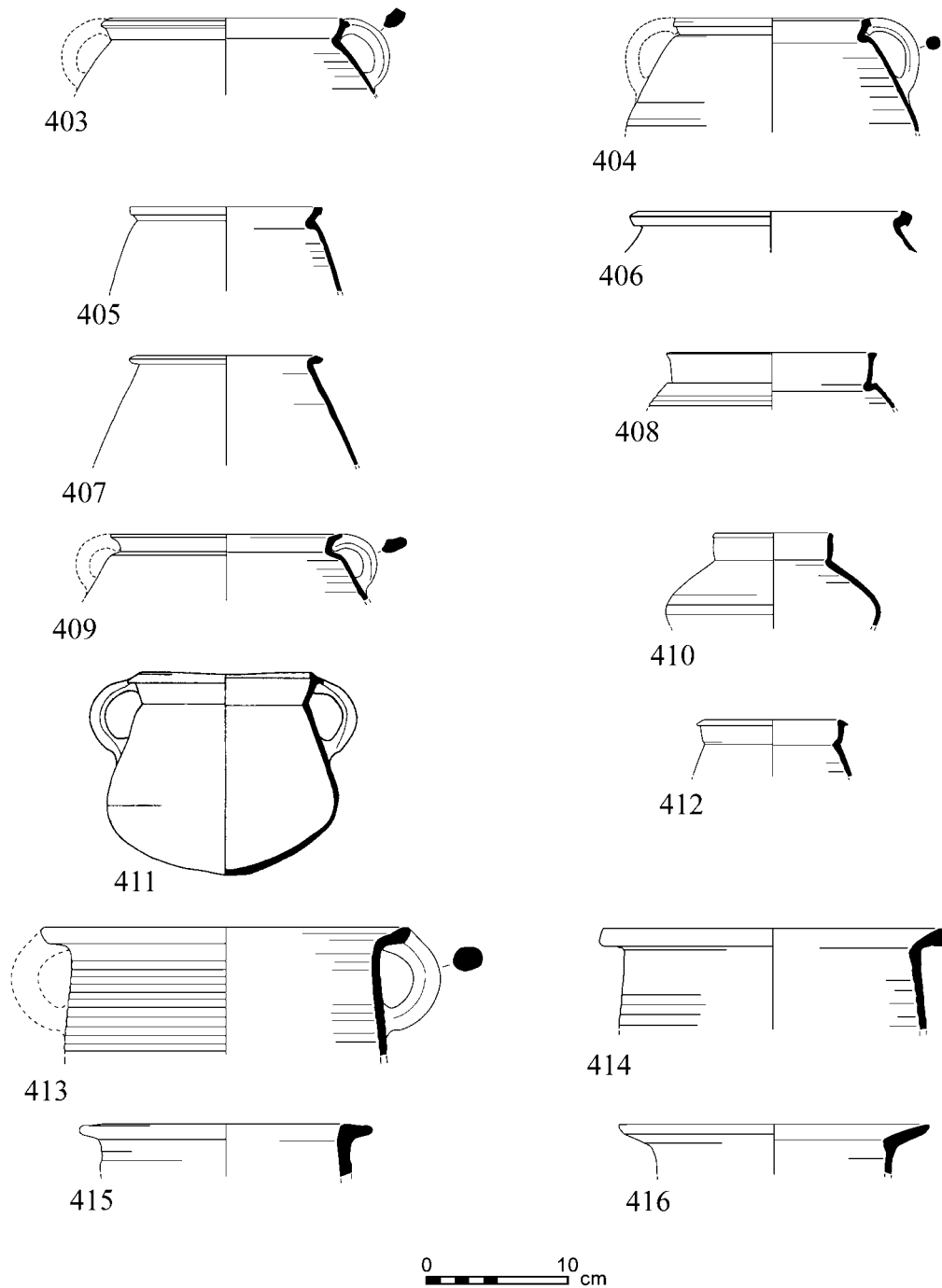


Figure 9.22. Roman Cooking Pots (403–416).

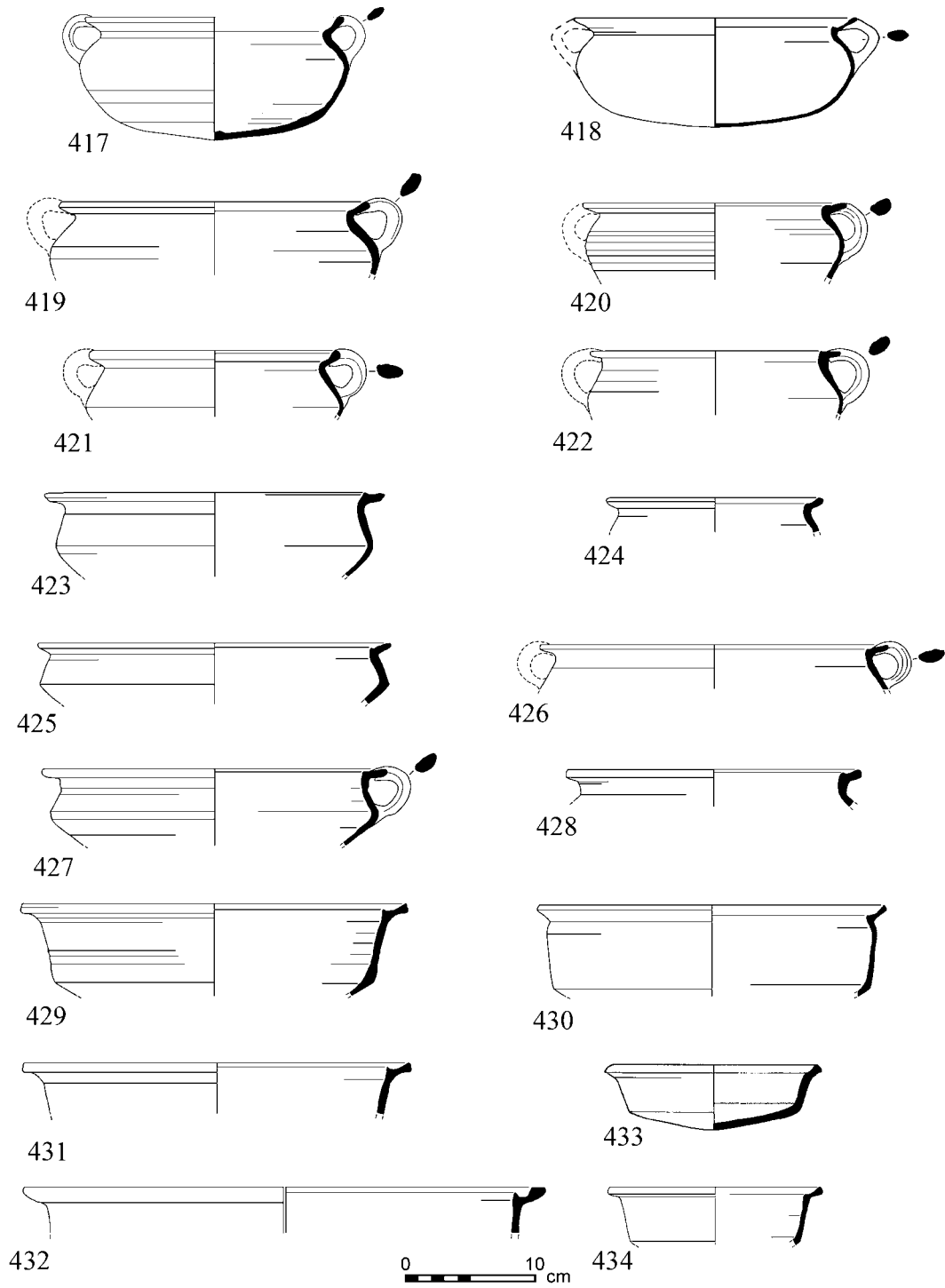


Figure 9.23. Hellenistic and Roman Casseroles (417–434).

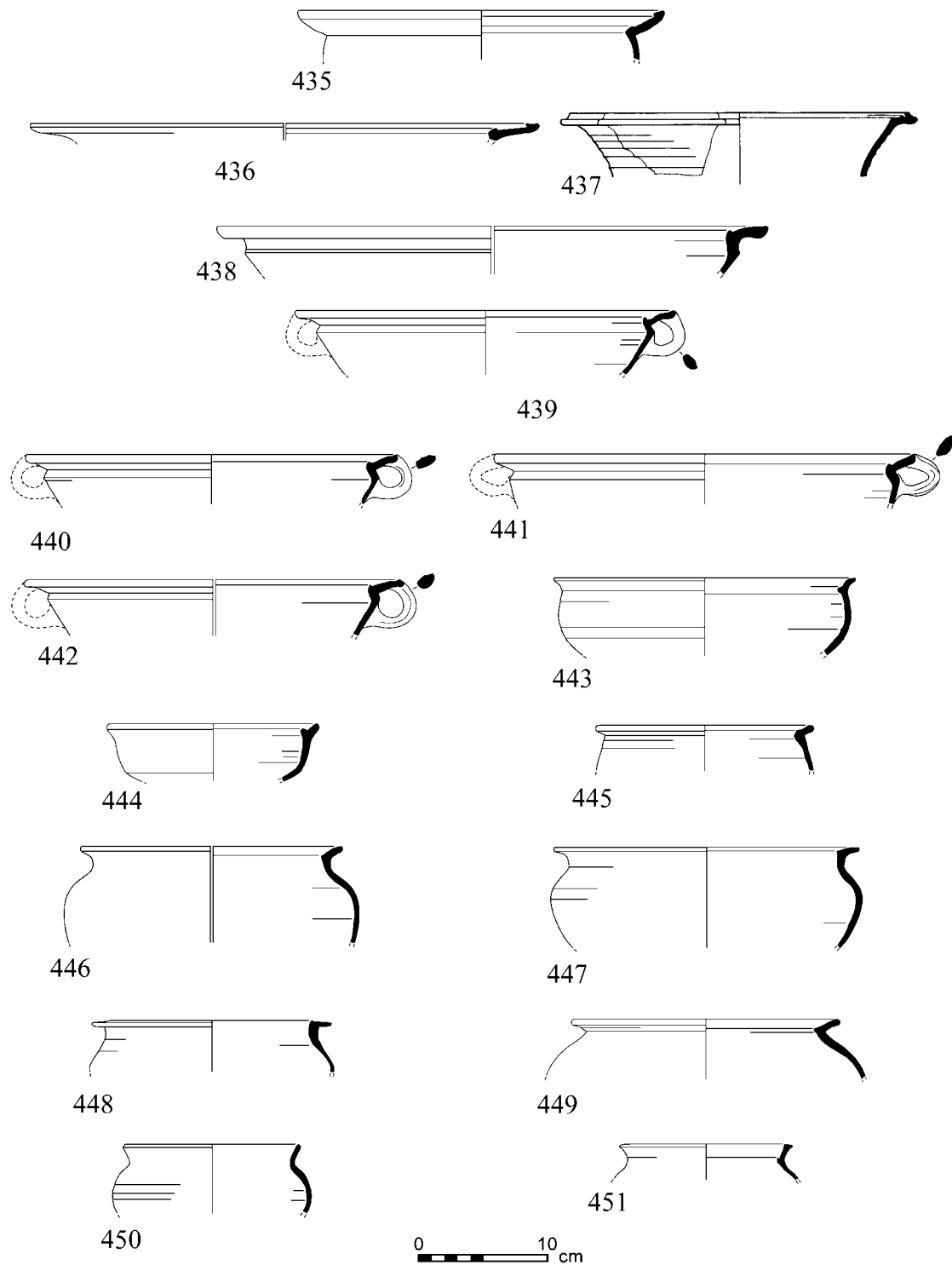


Figure 9.24. Hellenistic and Roman Casseroles (435–451).

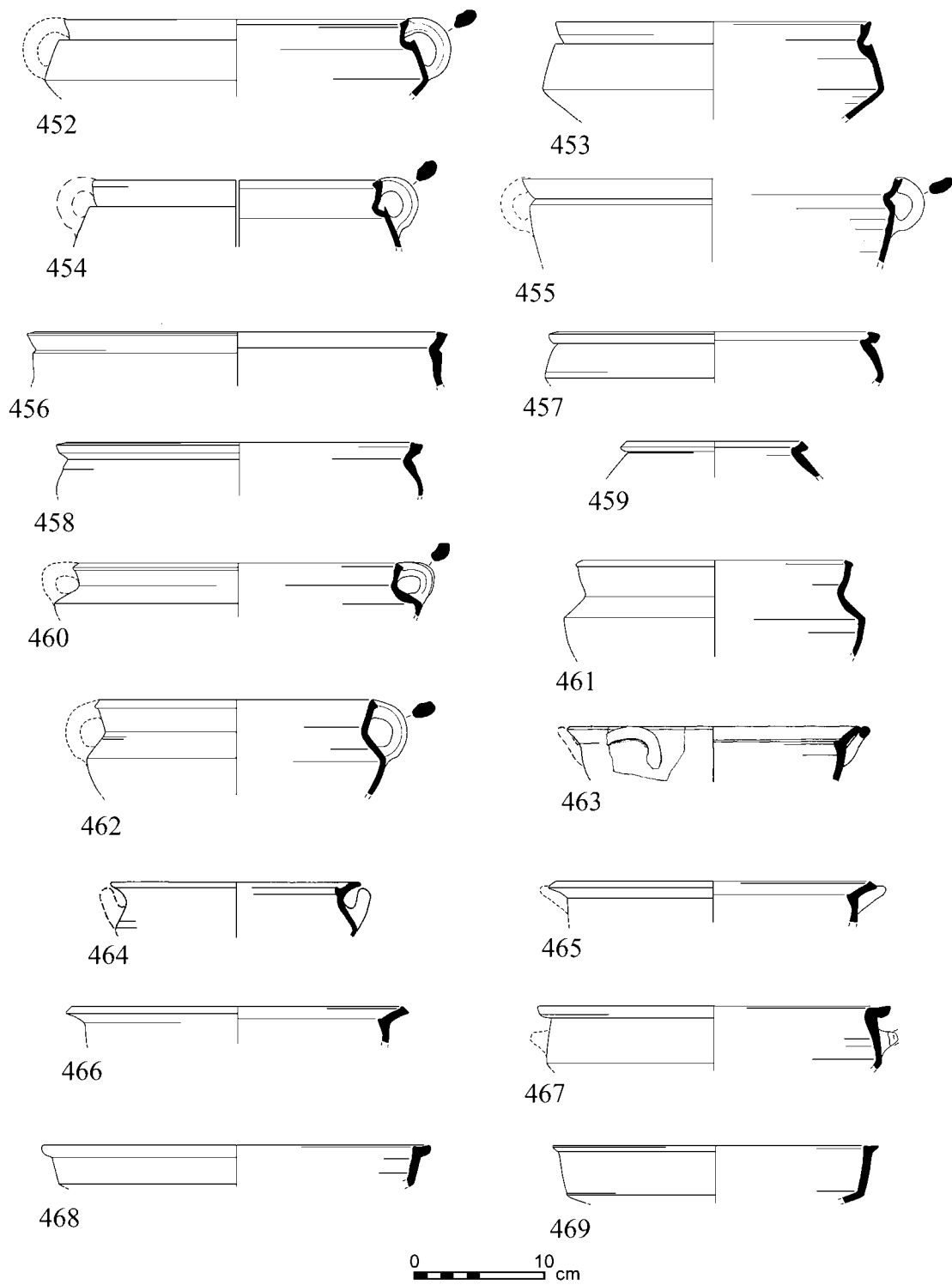


Figure 9.25. Roman Casseroles (452–469).

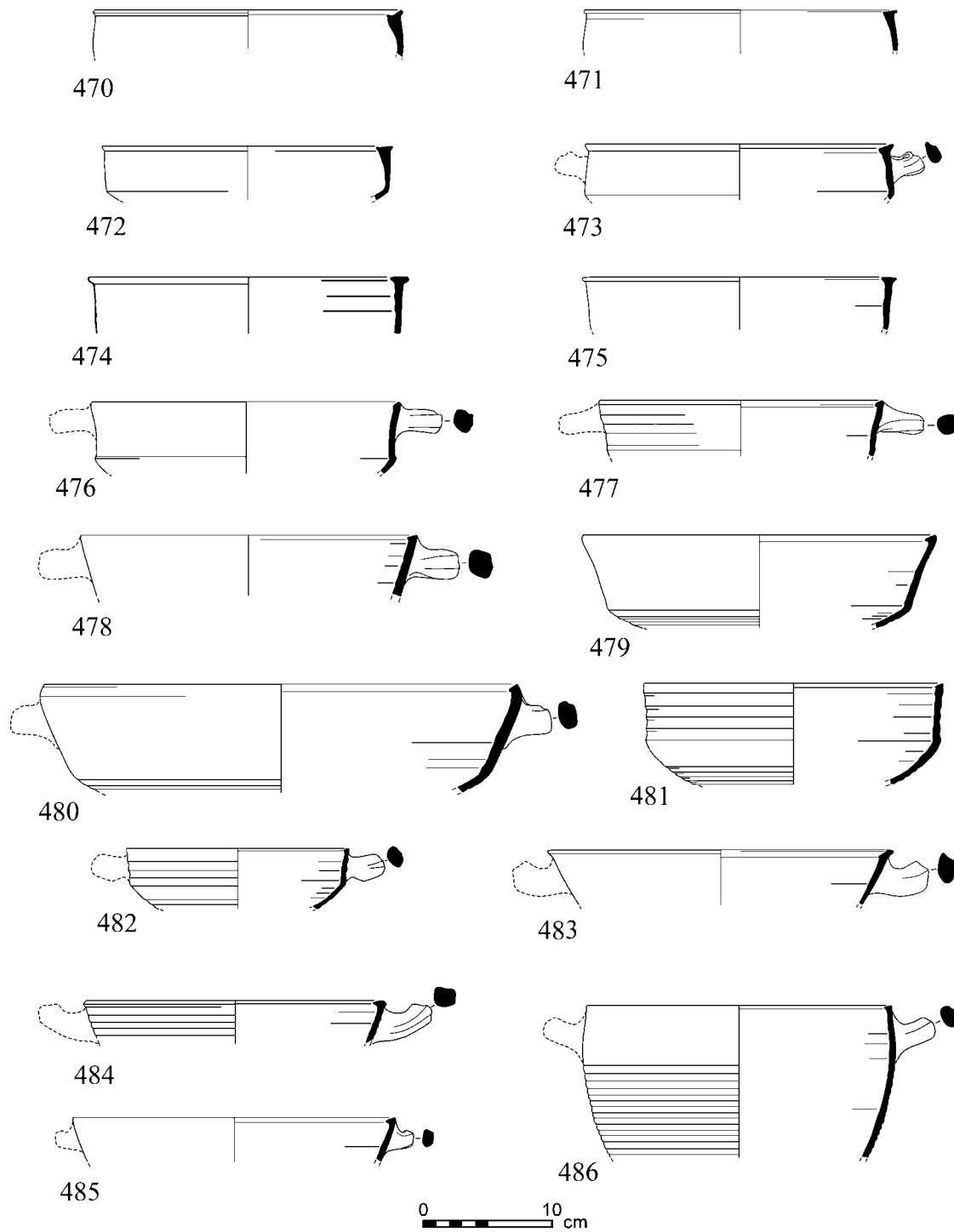


Figure 9.26. Roman and Byzantine Casseroles (470–486).

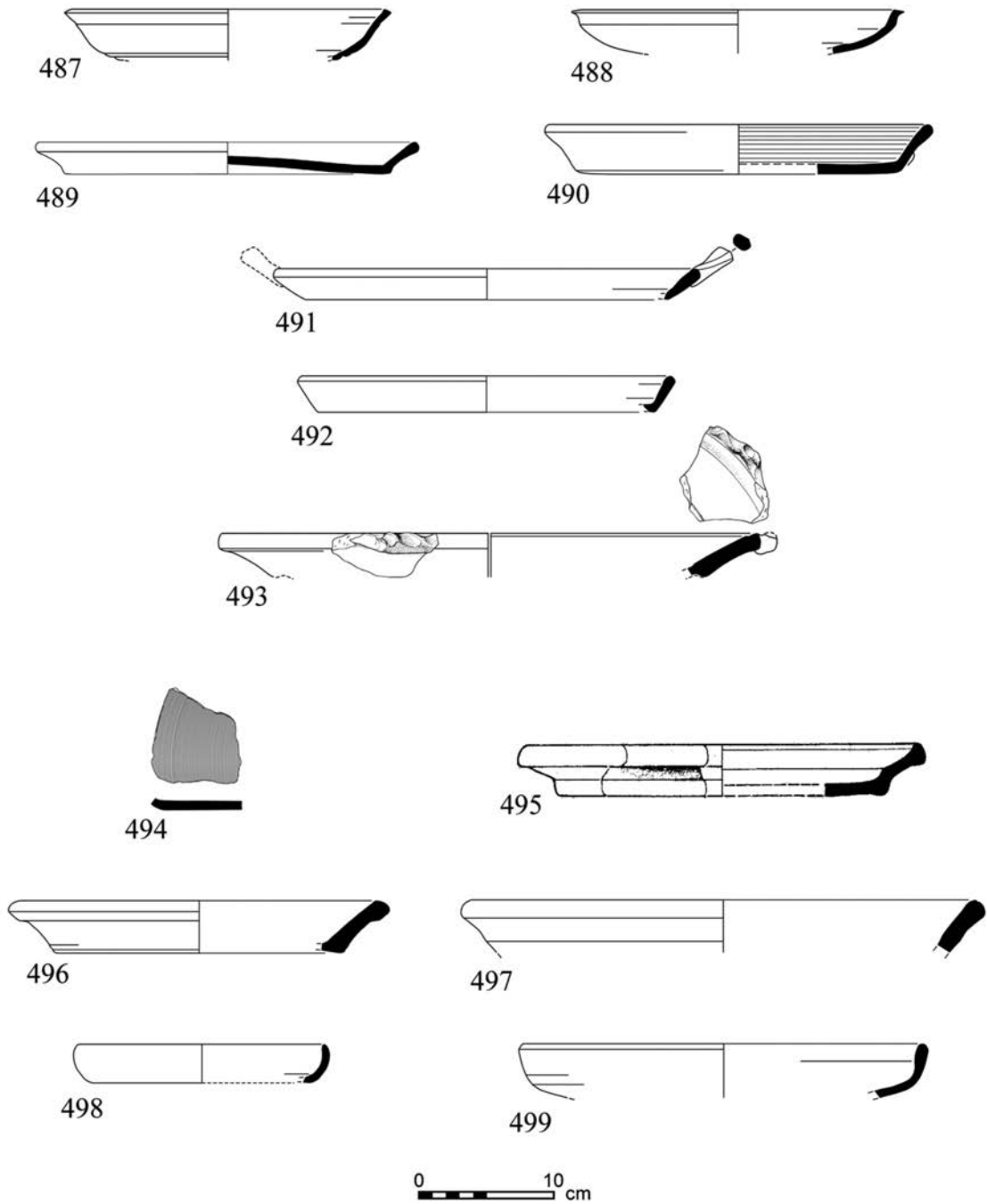


Figure 9.27. Late Roman and Byzantine Casseroles (487–488), Hellenistic Pans (489–499).

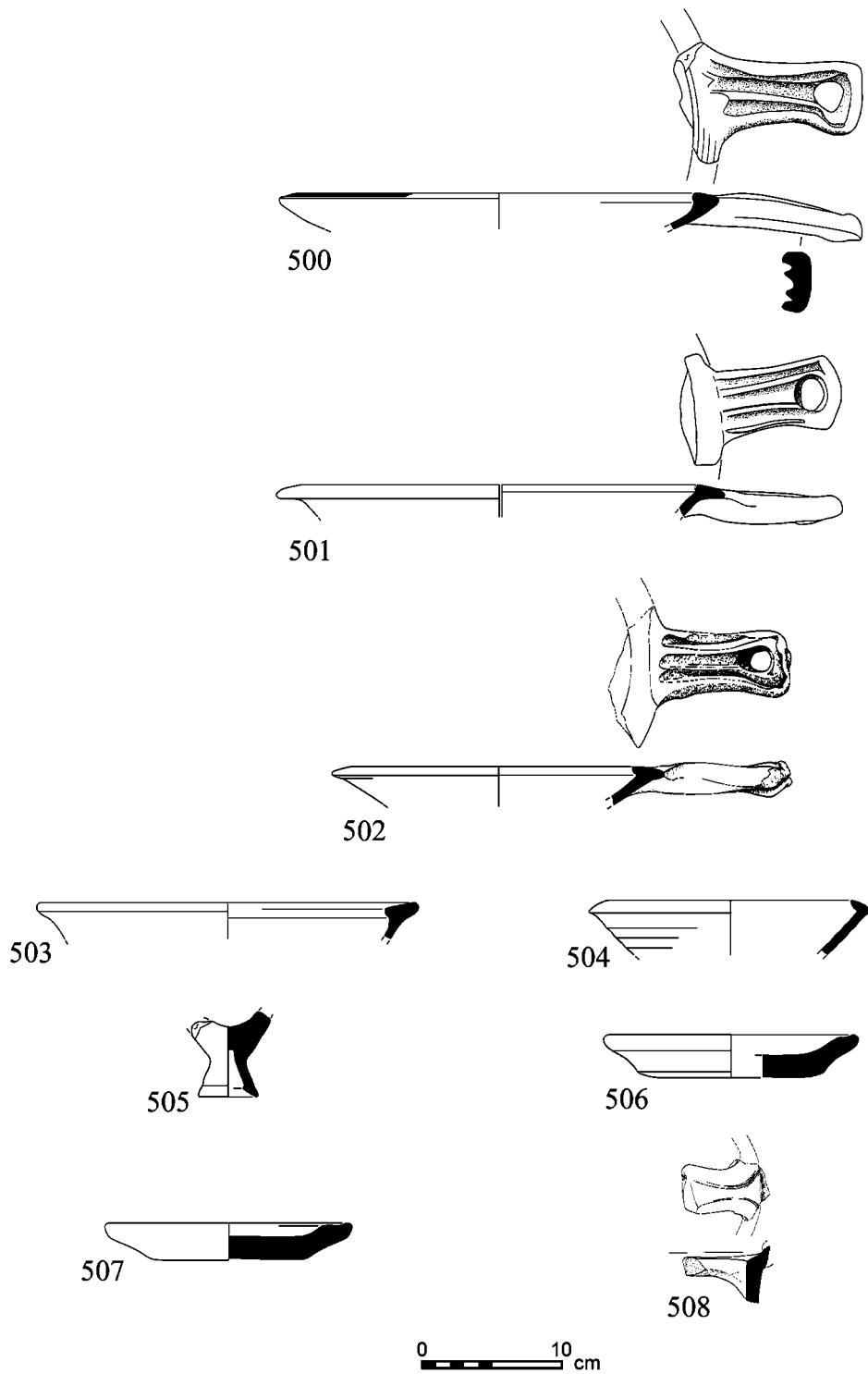


Figure 9.28. Byzantine Pans (500–508).

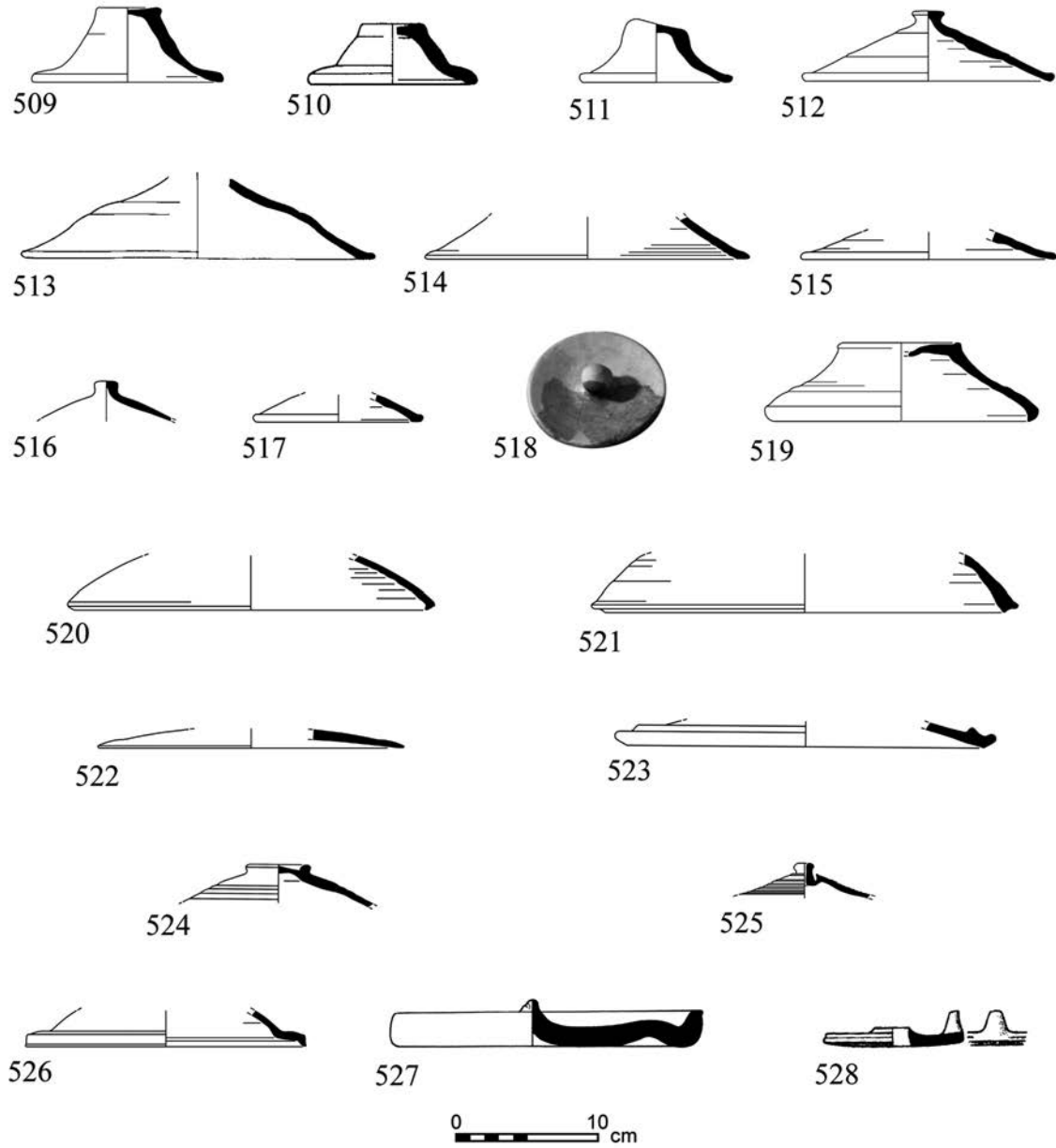


Figure 9.29. Hellenistic to Roman Lids (509–528).

STORAGE CONTAINERS

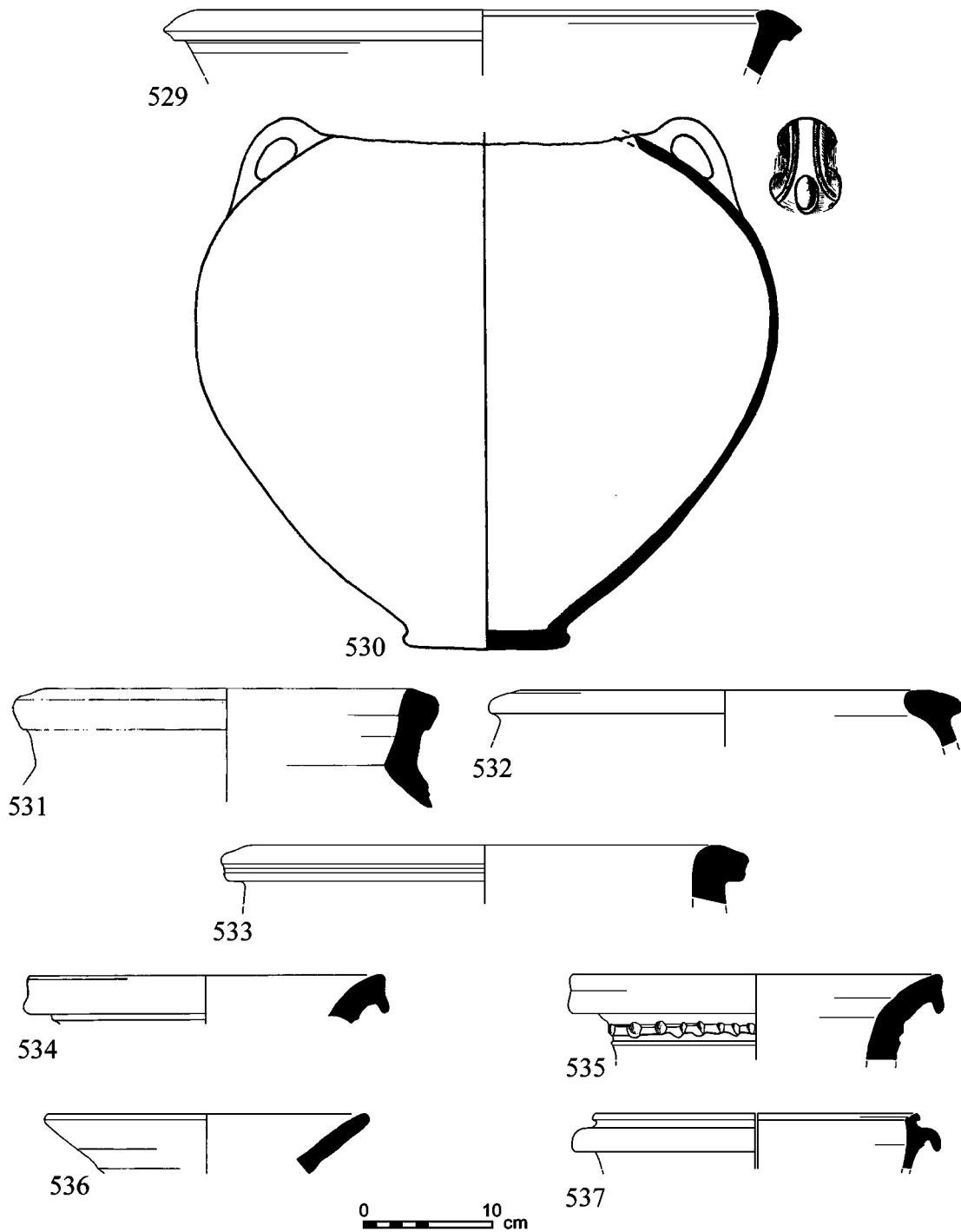


Figure 9.30. Persian to Byzantine Dolia (529-537).

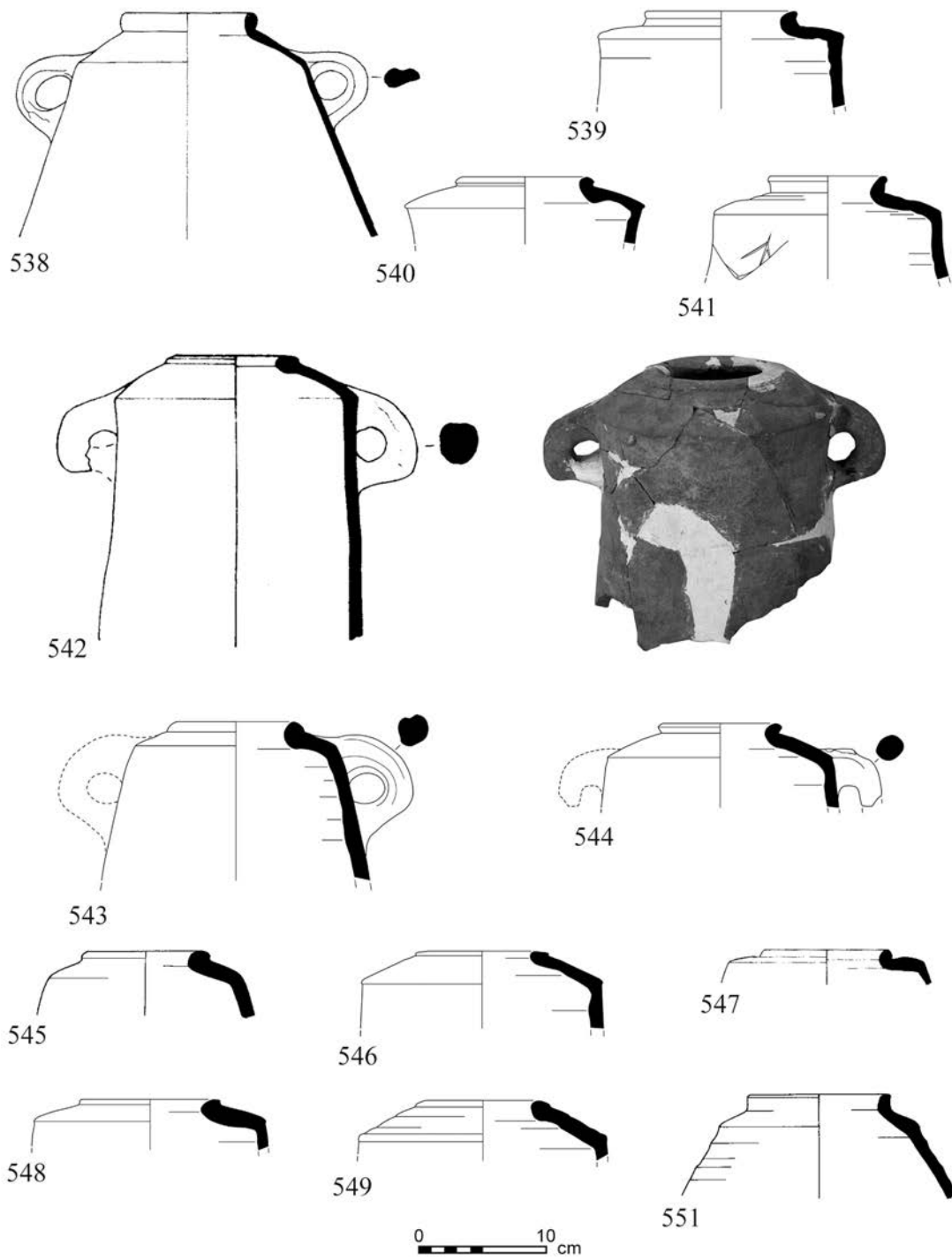


Figure 9.31. Persian Jars (538–551).

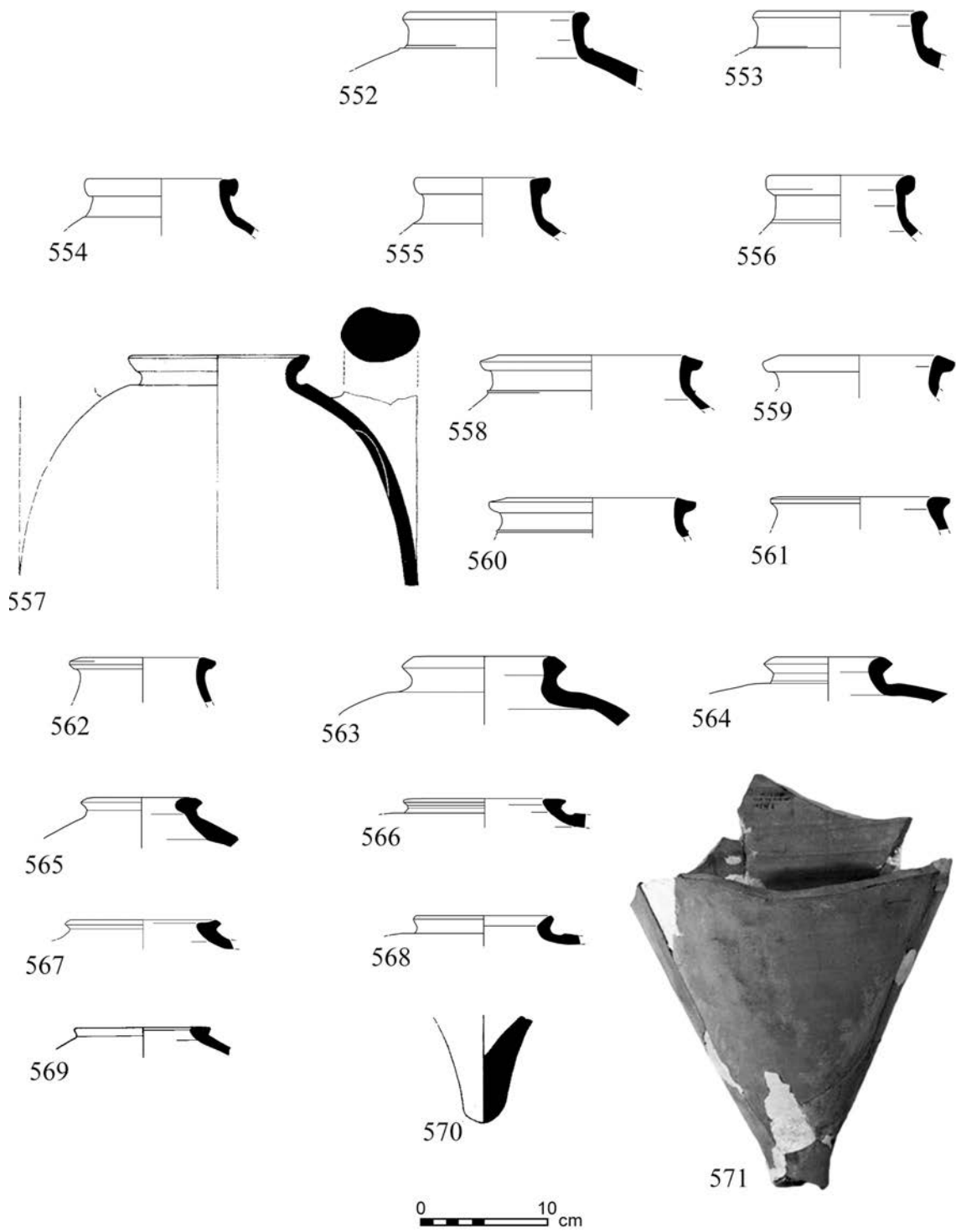


Figure 9.32. Persian Jars (552–571).

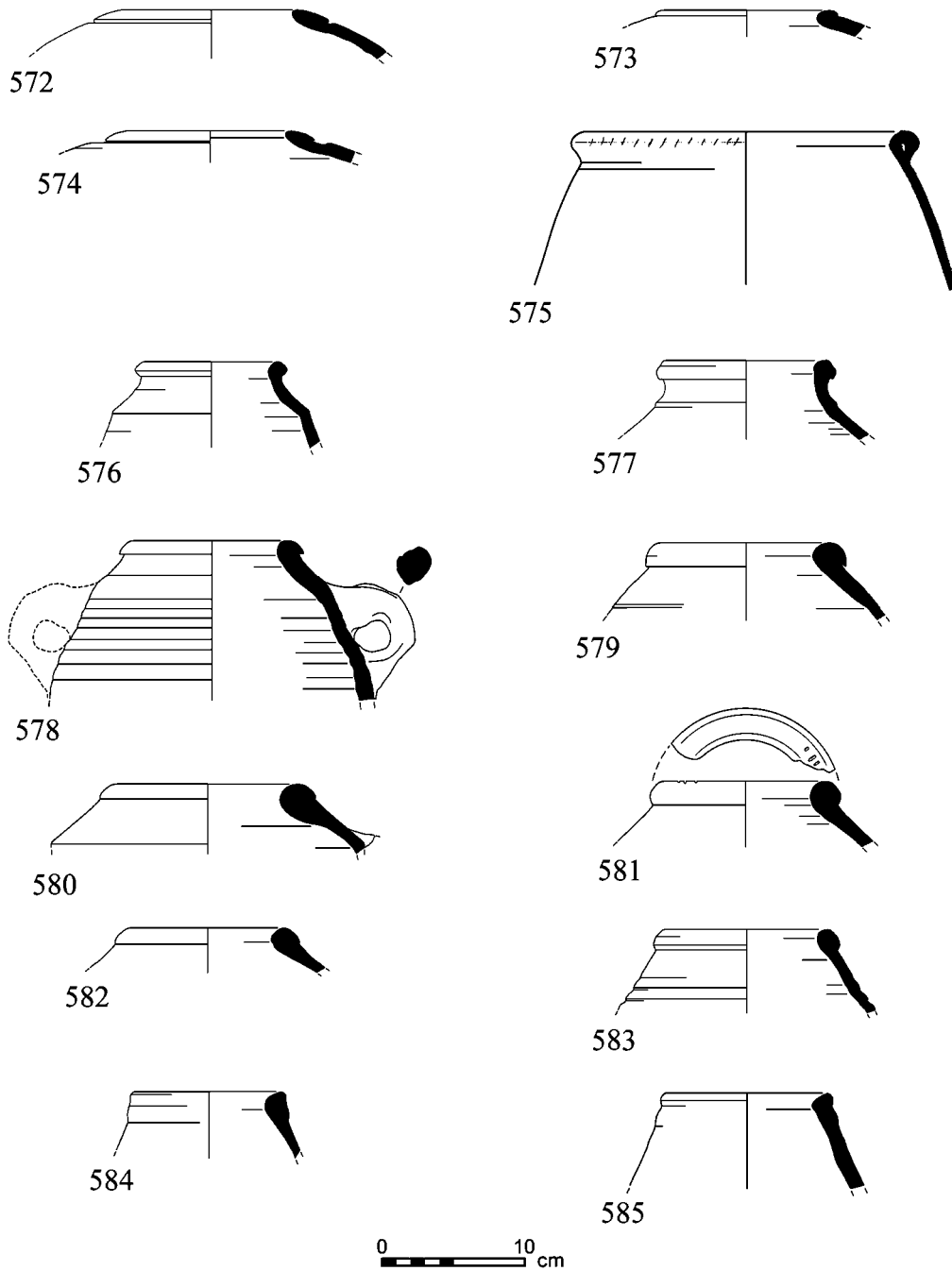


Figure 9.33. Persian Jars (572–577), Hellenistic Jars (578–585).

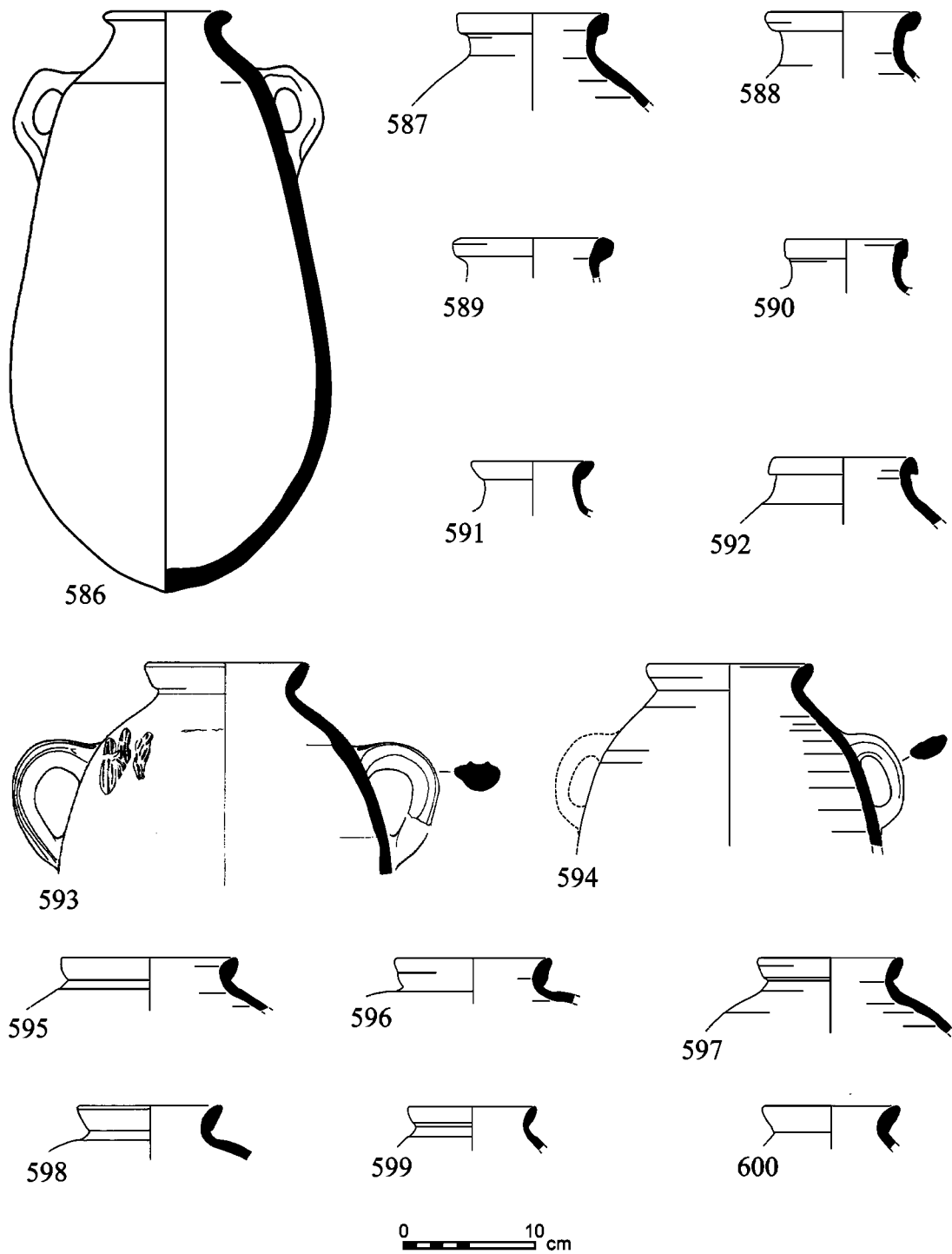


Figure 9.34. Hellenistic Jars (586–600).

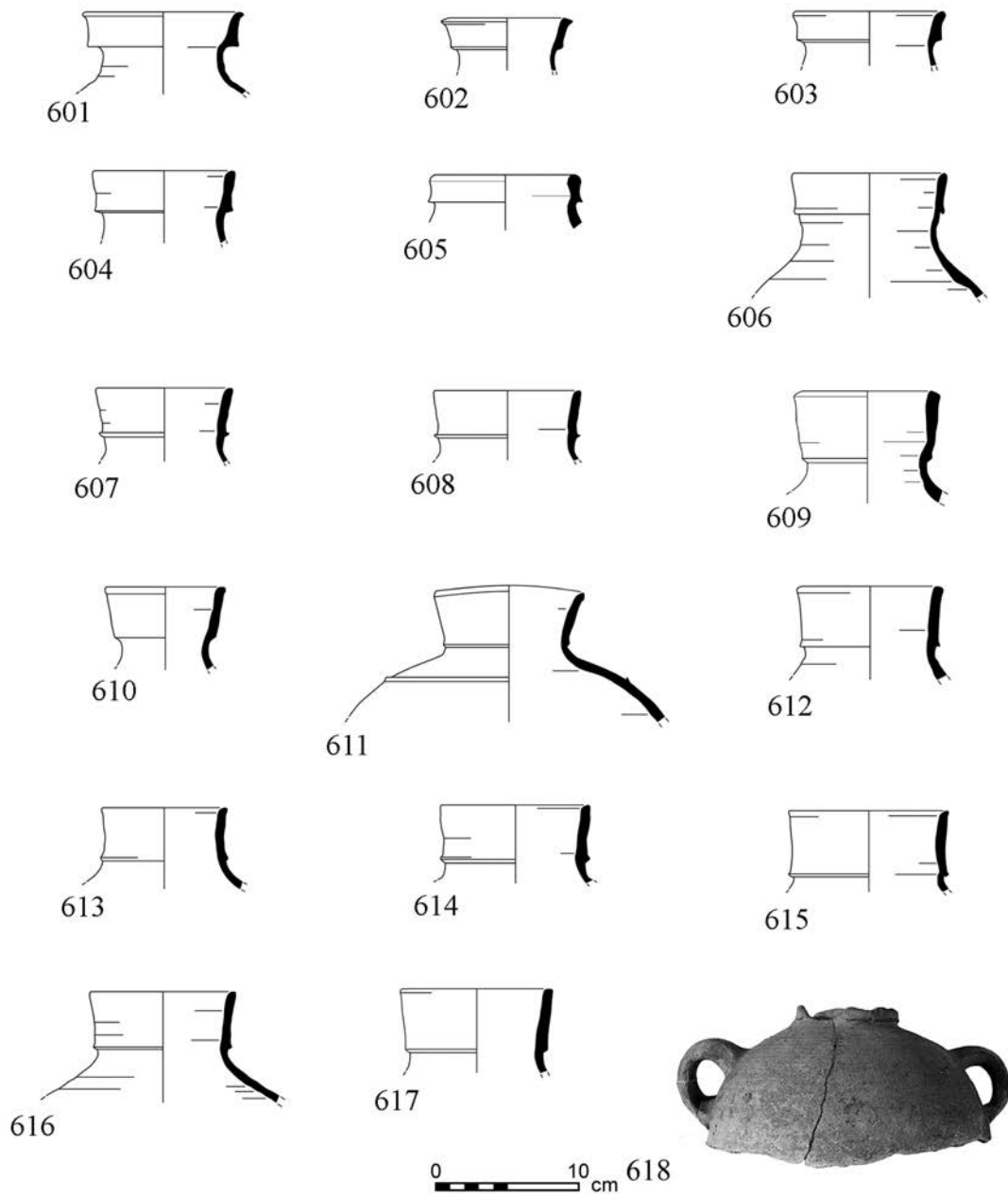


Figure 9.35. Early Roman Jars (601–618).

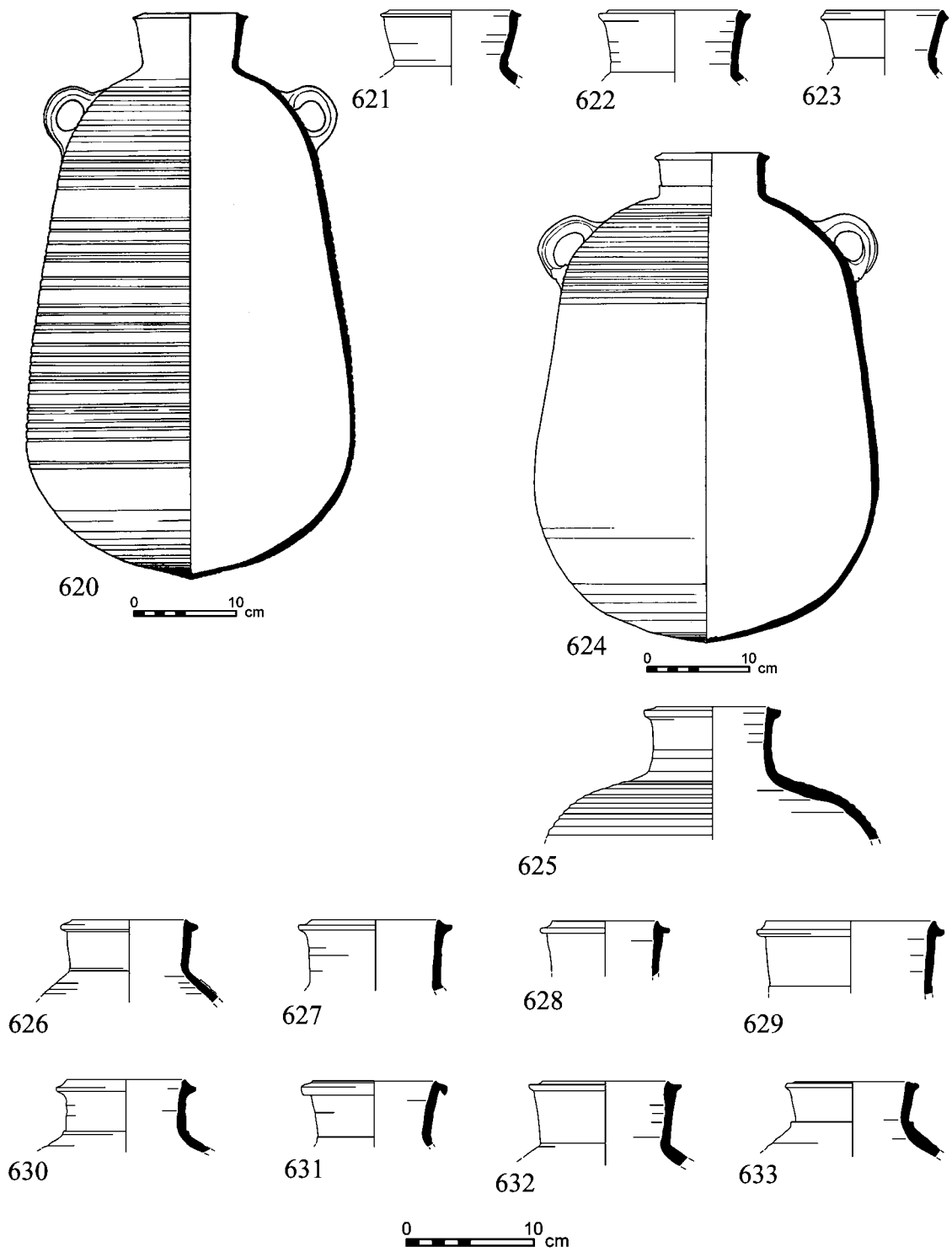


Figure 9.36. Roman Jars (620–633).

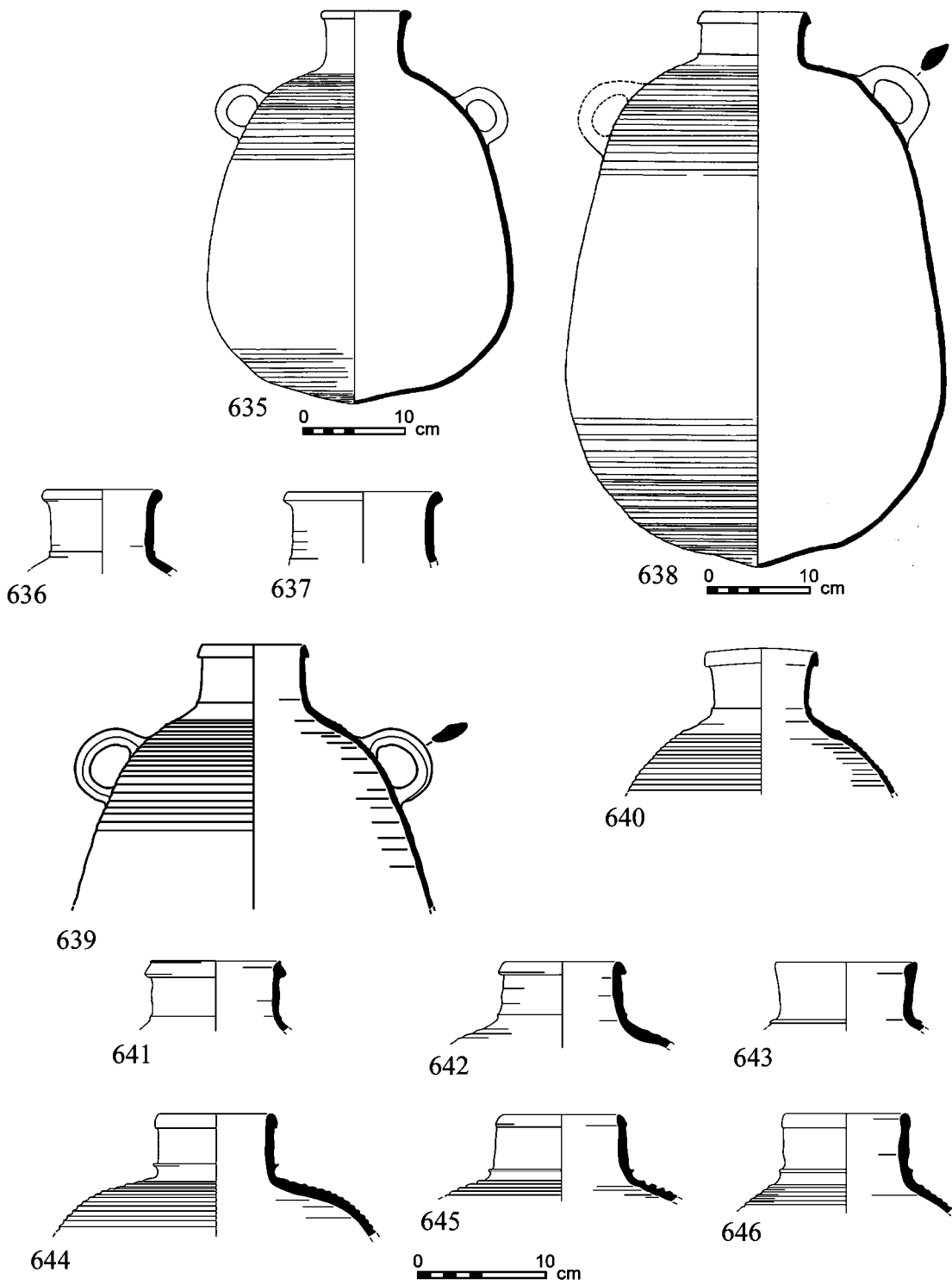


Figure 9.37. Roman Jars (635–646).

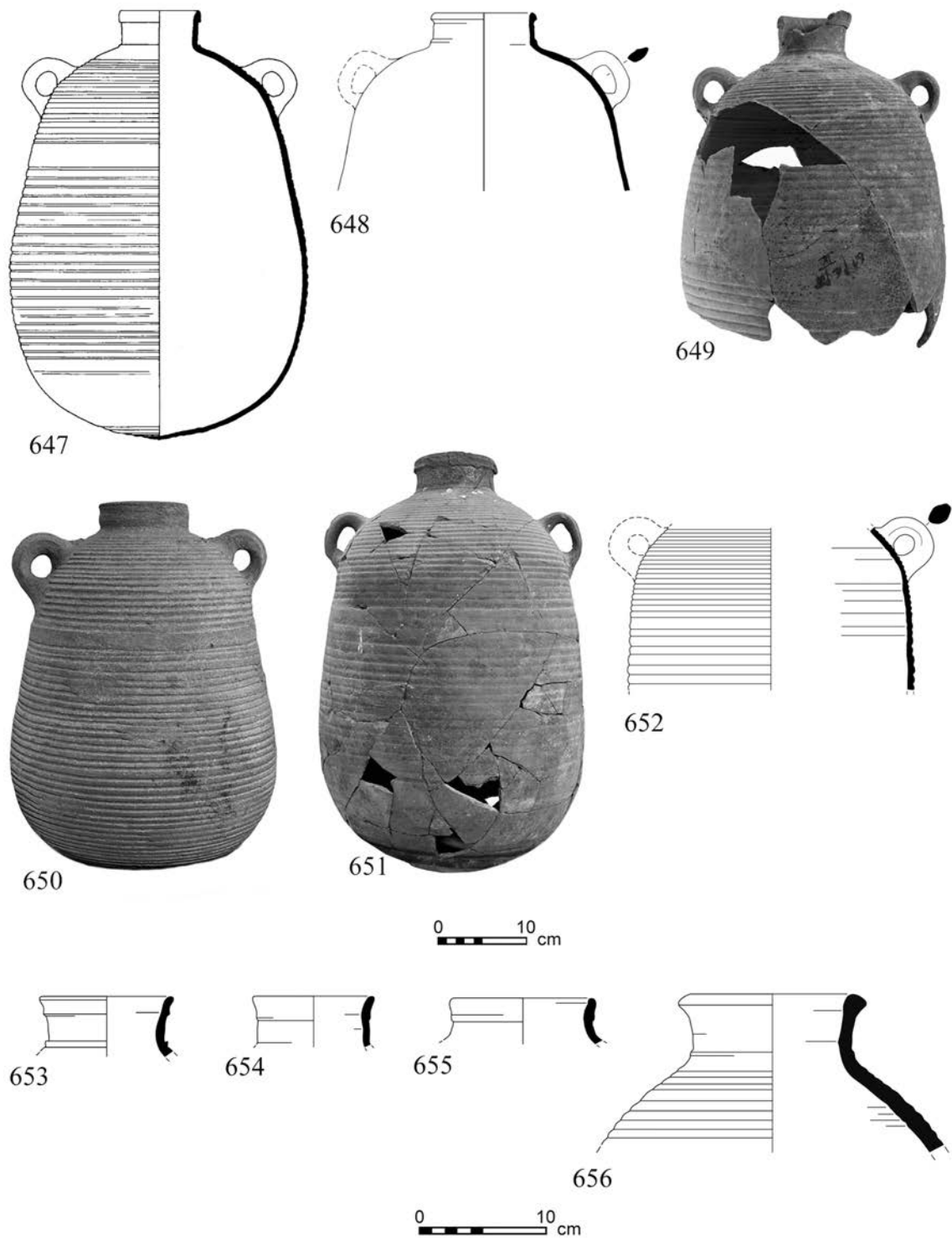


Figure 9.38. Late Roman and Byzantine Jars (647–656).

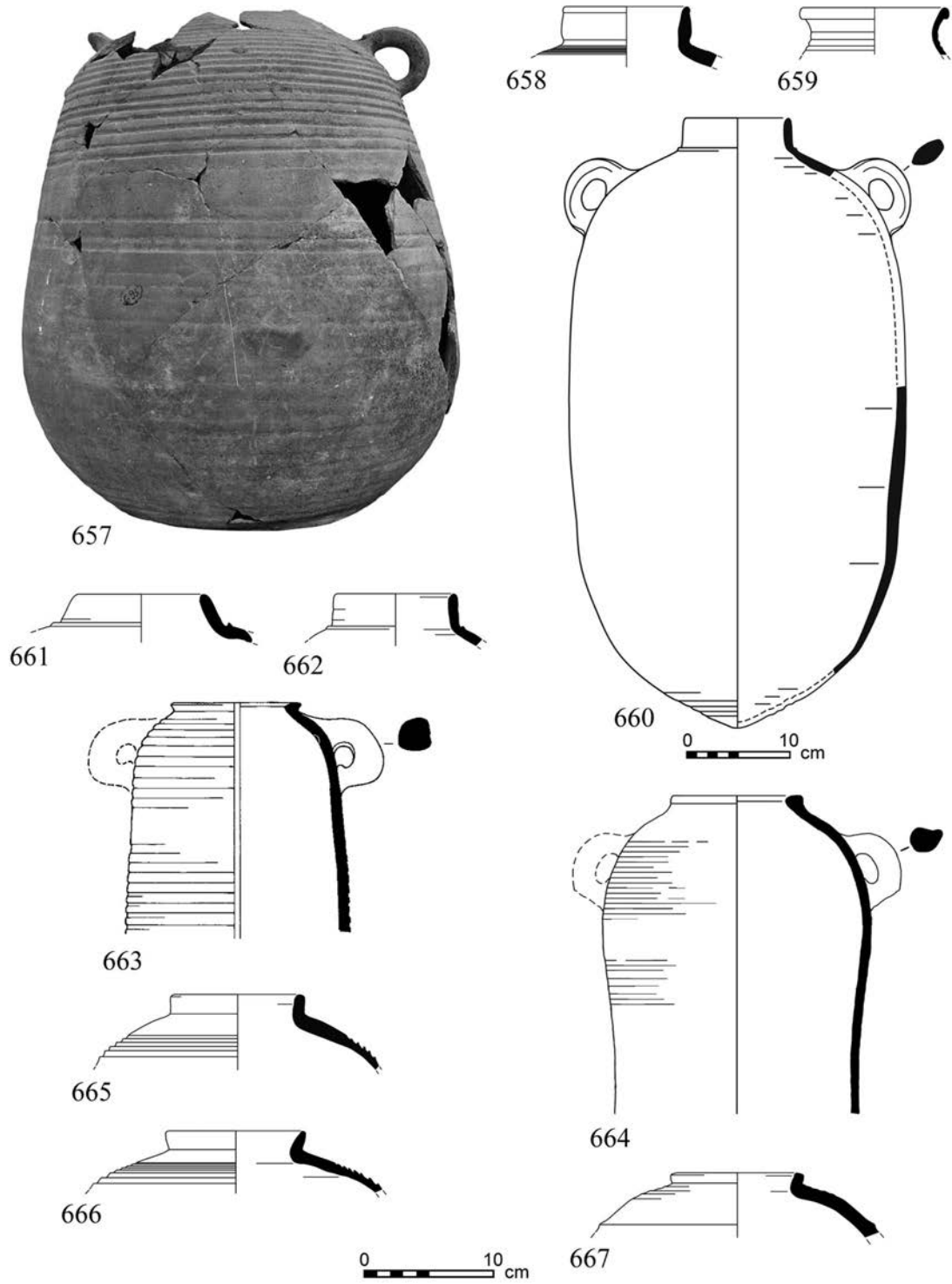


Figure 9.39. Late Roman and Byzantine Jars (657–667).

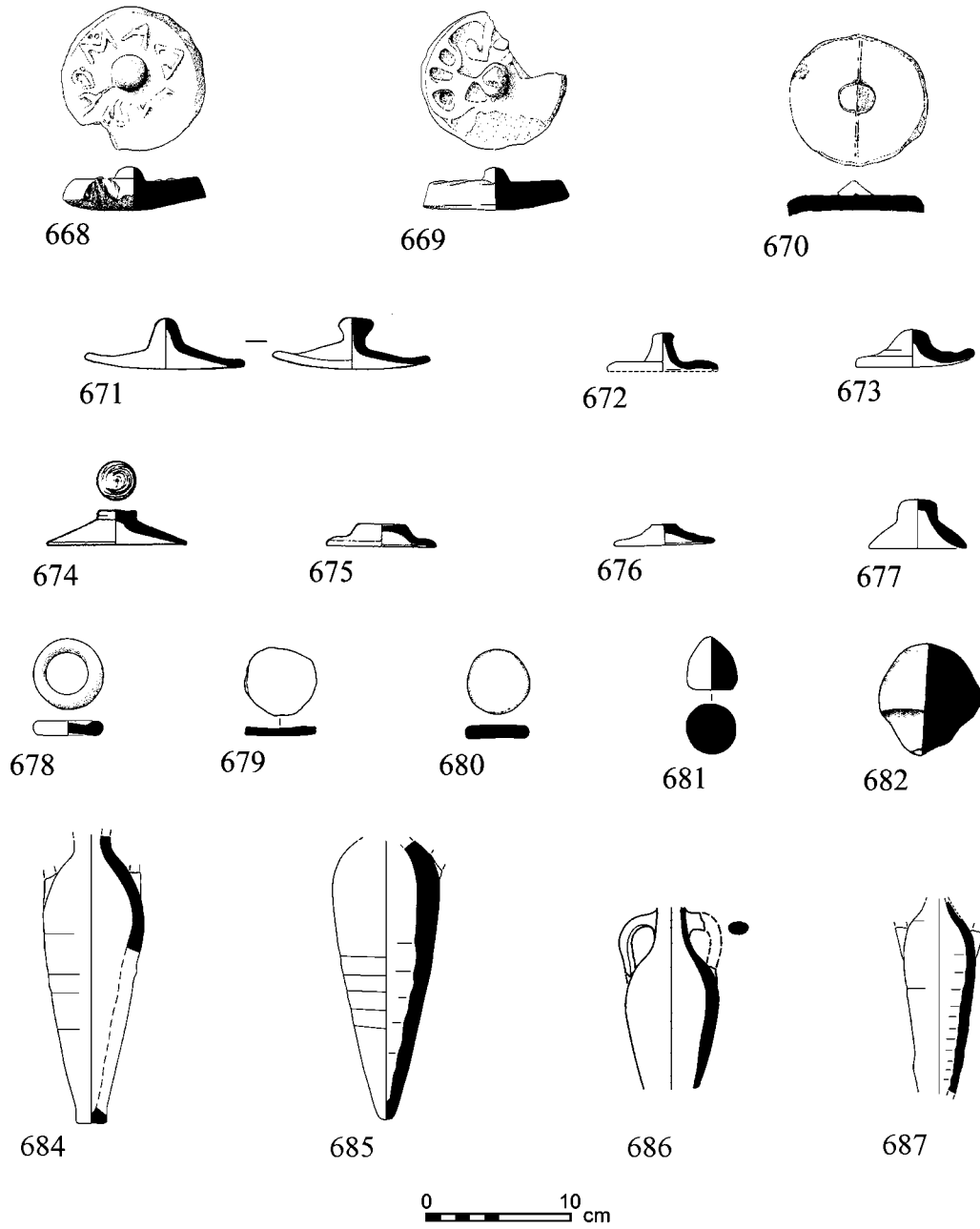


Figure 9.40. Roman and Byzantine Stoppers (668–682); Hellenistic Amphoriskoi (684–687).

FINE WARE

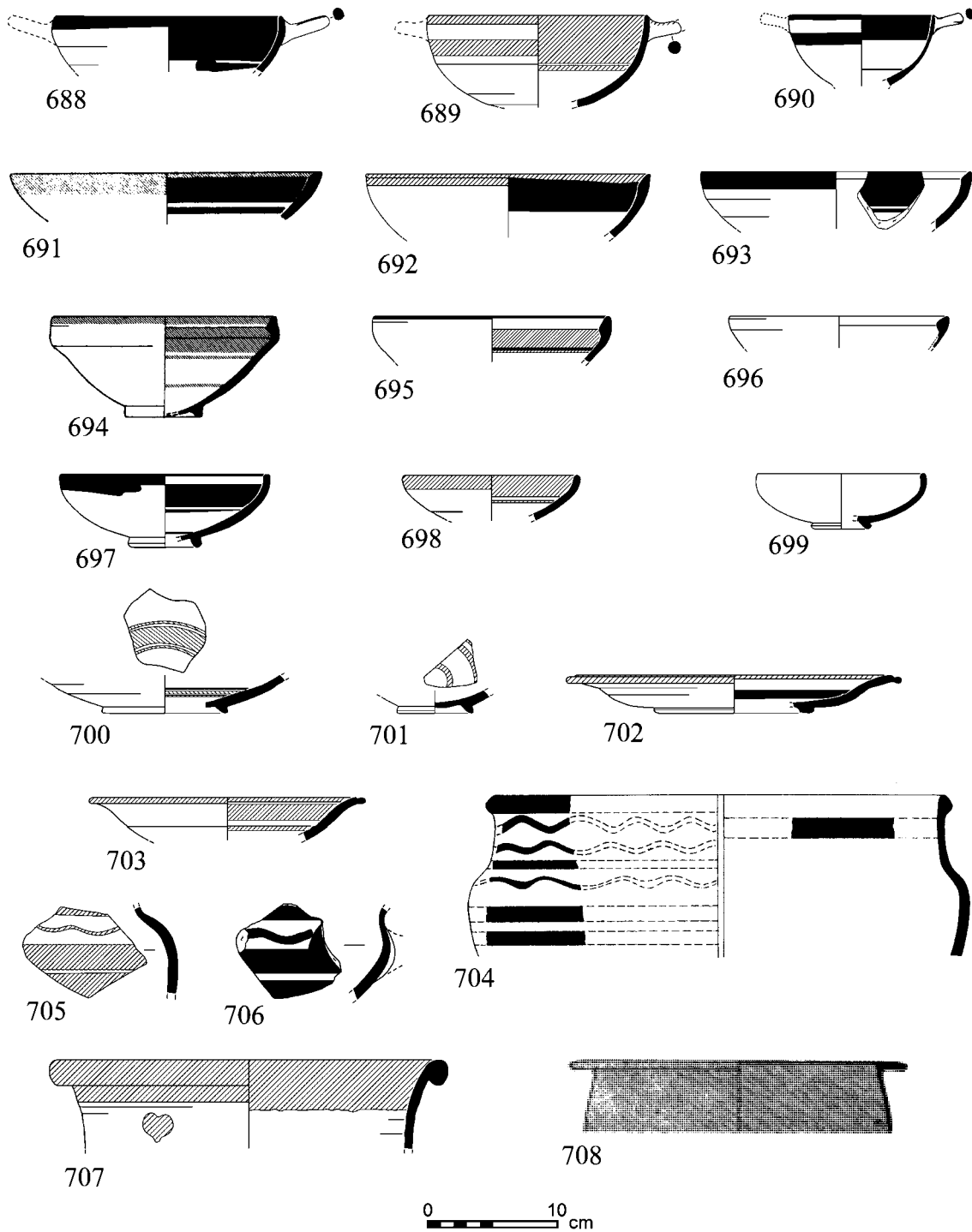


Figure 9.41. East Greek Bowls, Plates and Kraters (688–708).

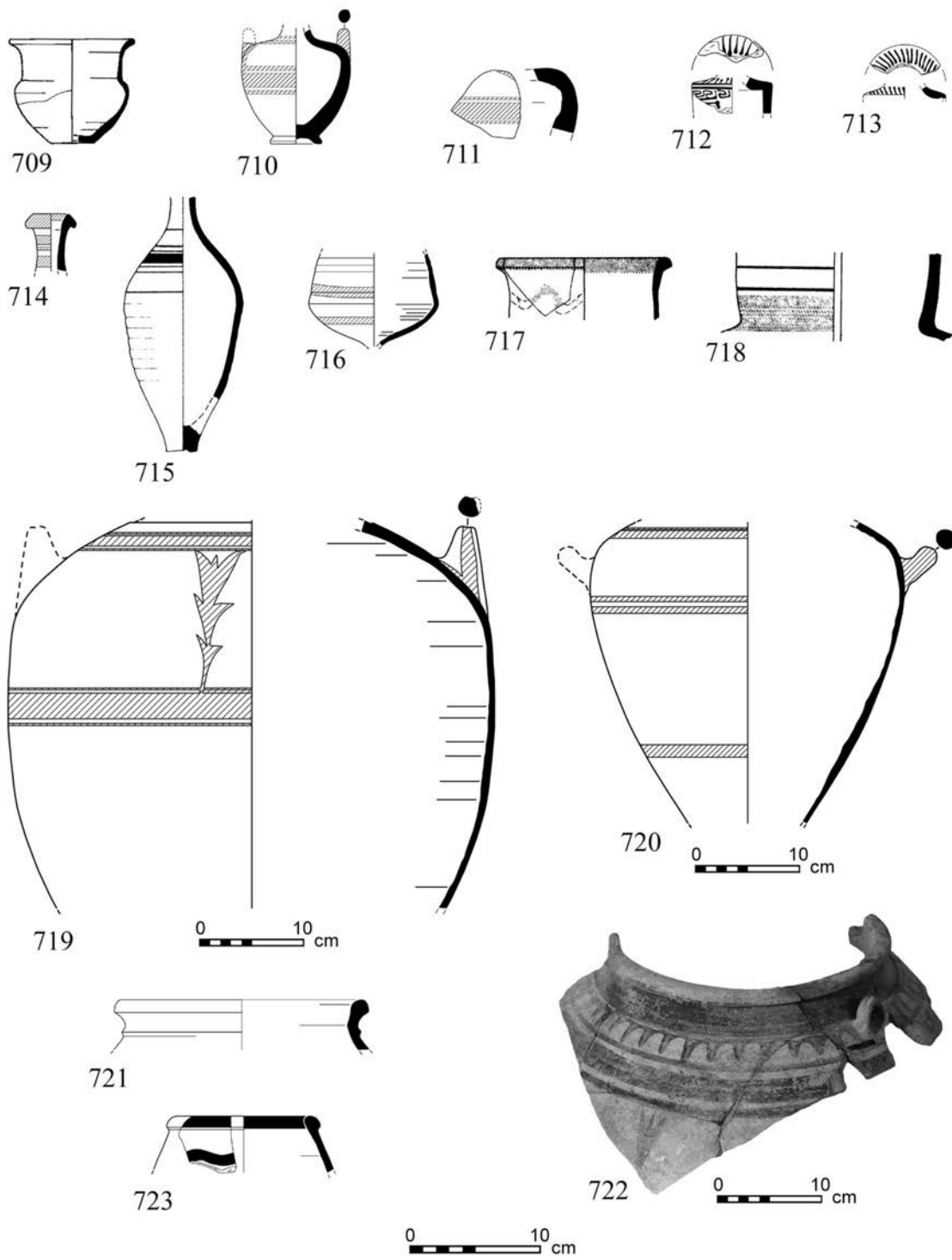


Figure 9.42. East Greek Various Vessels (709–722).

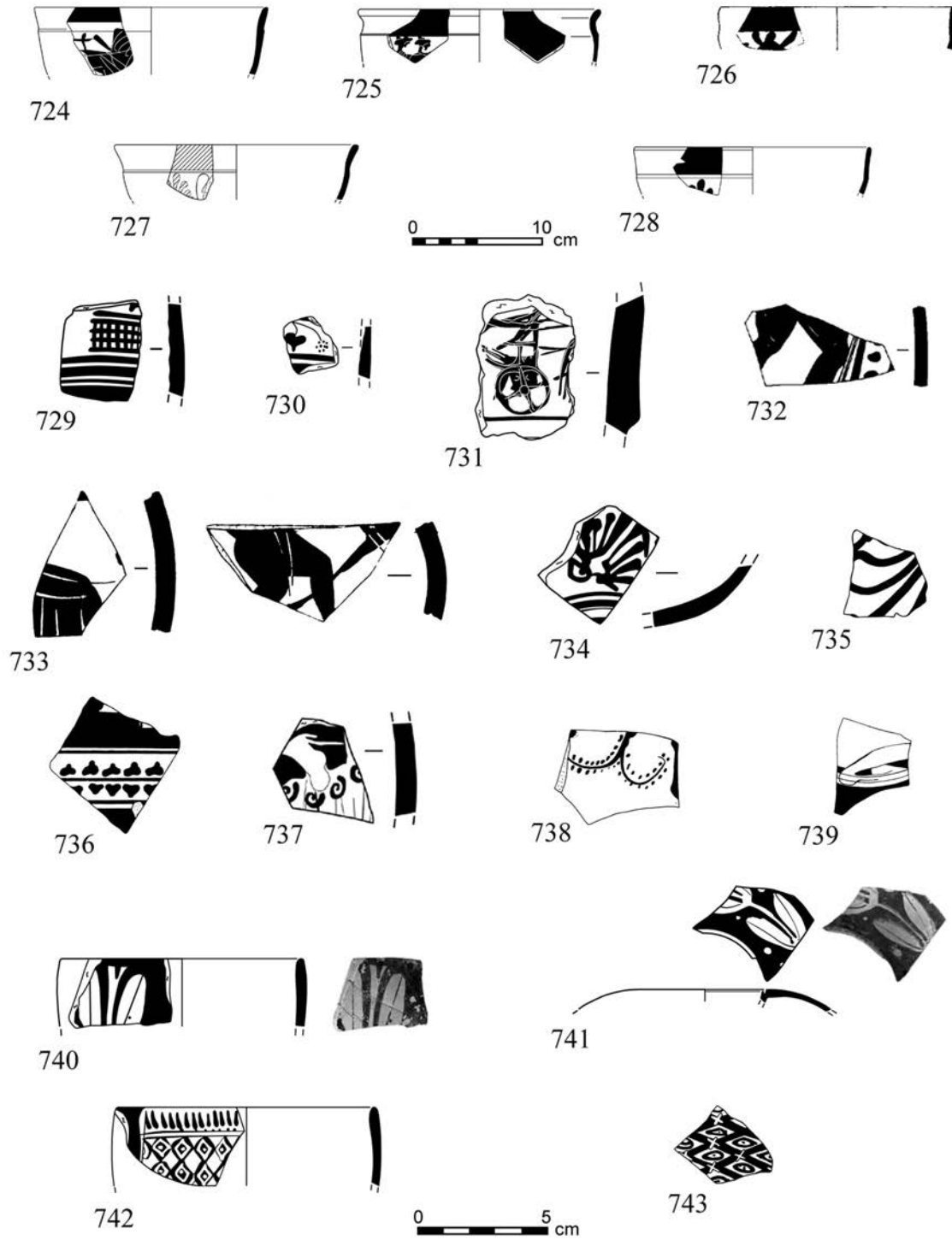


Figure 9.43. Black Figured Vessels (724–739); Red Figured Vessels (740–743).

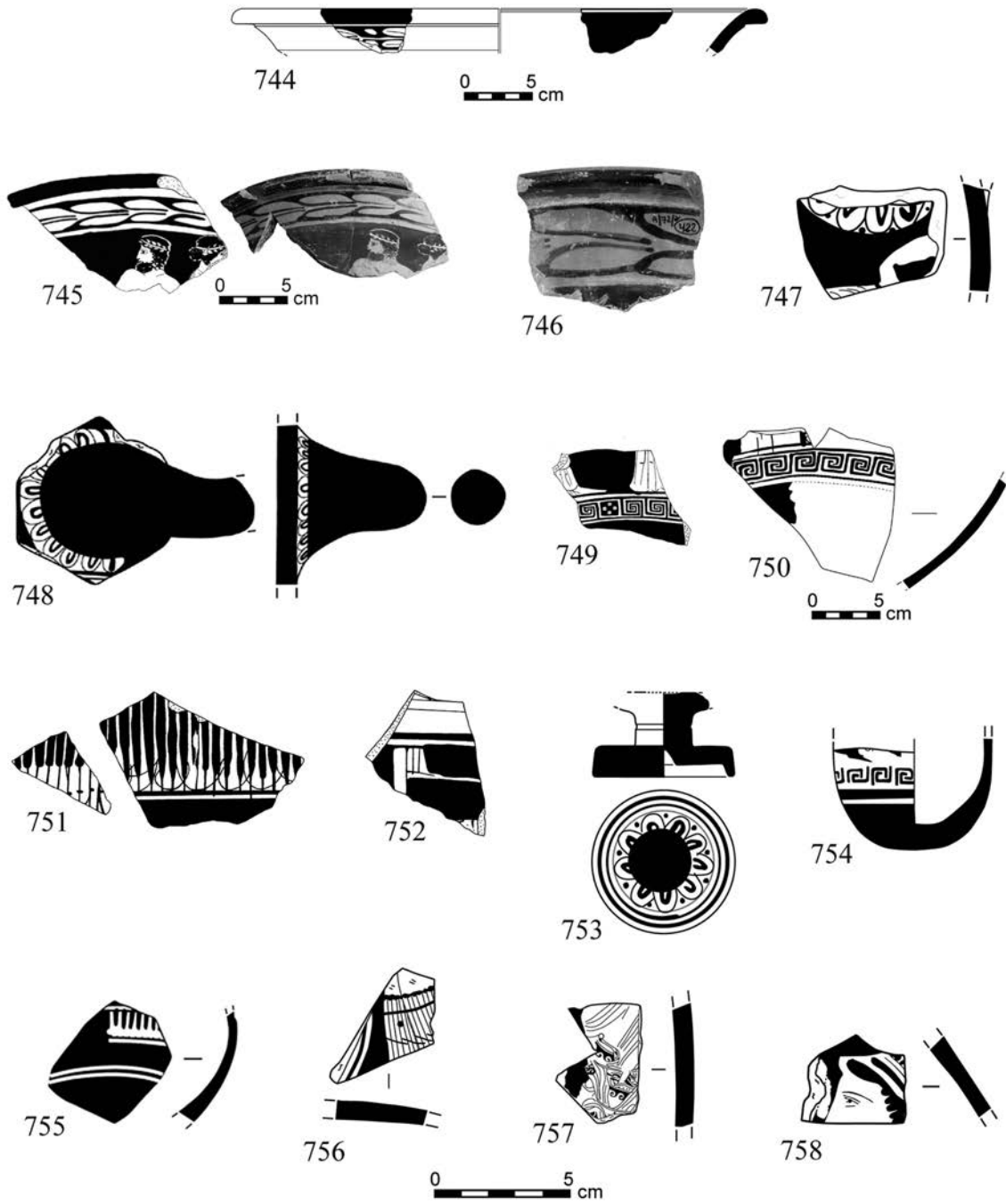


Figure 9.44. Red Figured Vessels (744–758).

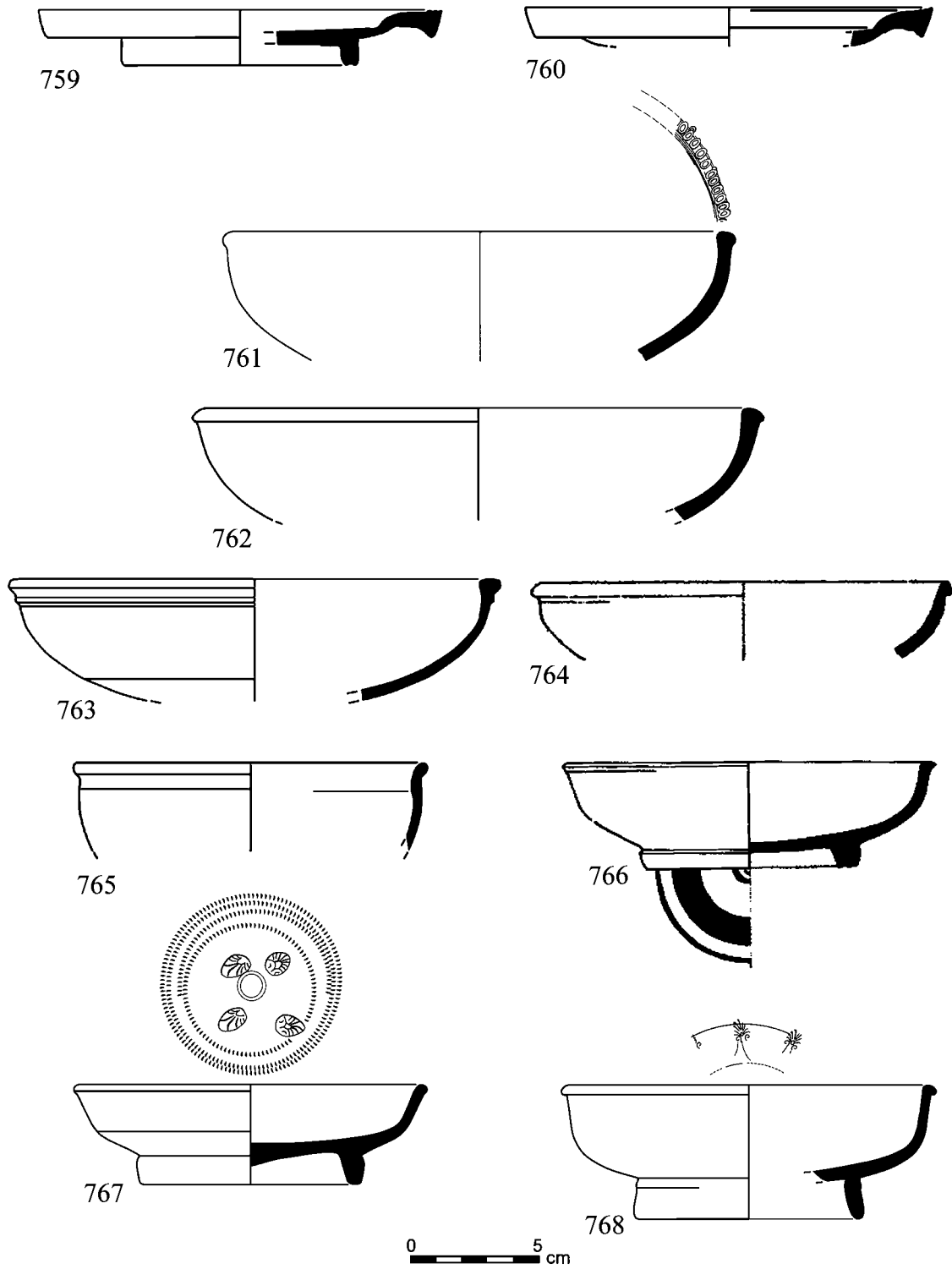


Figure 9.45. Attic Black Glazed Bowls and Plates (759–768).

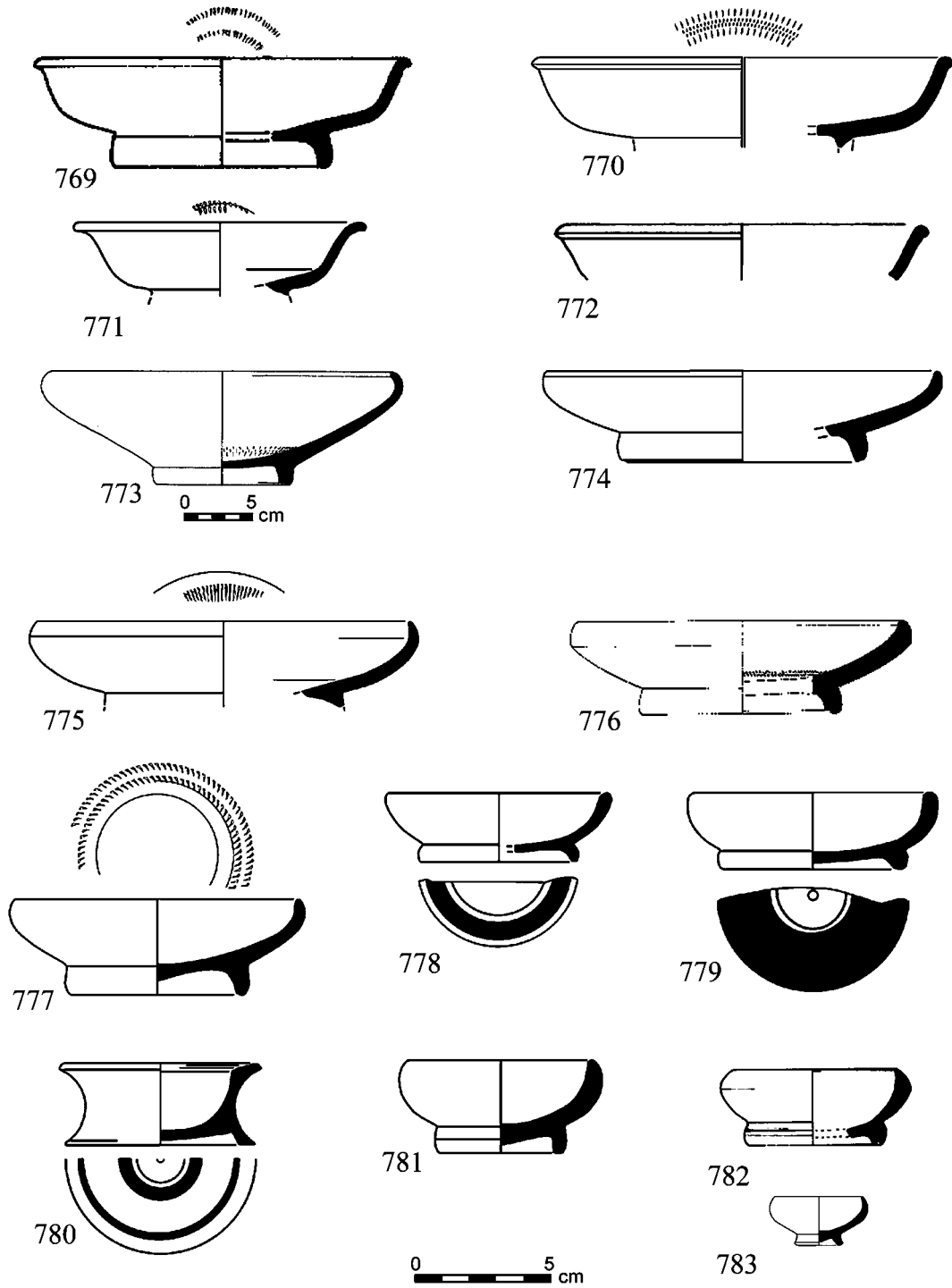


Figure 9.46. Black Glazed Bowls (769–783).

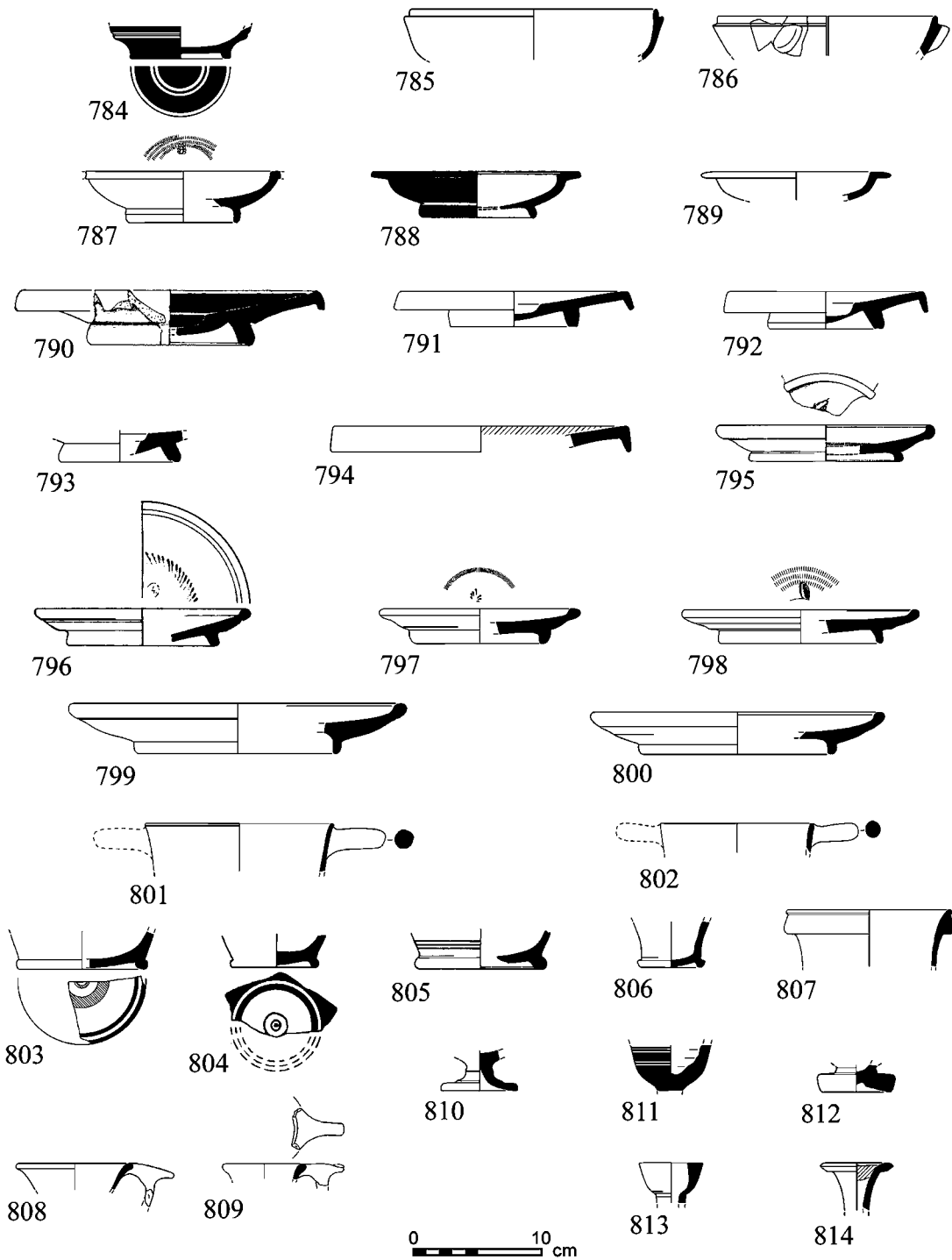


Figure 9.47. Black Glazed Bowls, Plates and Juglets (784–814).

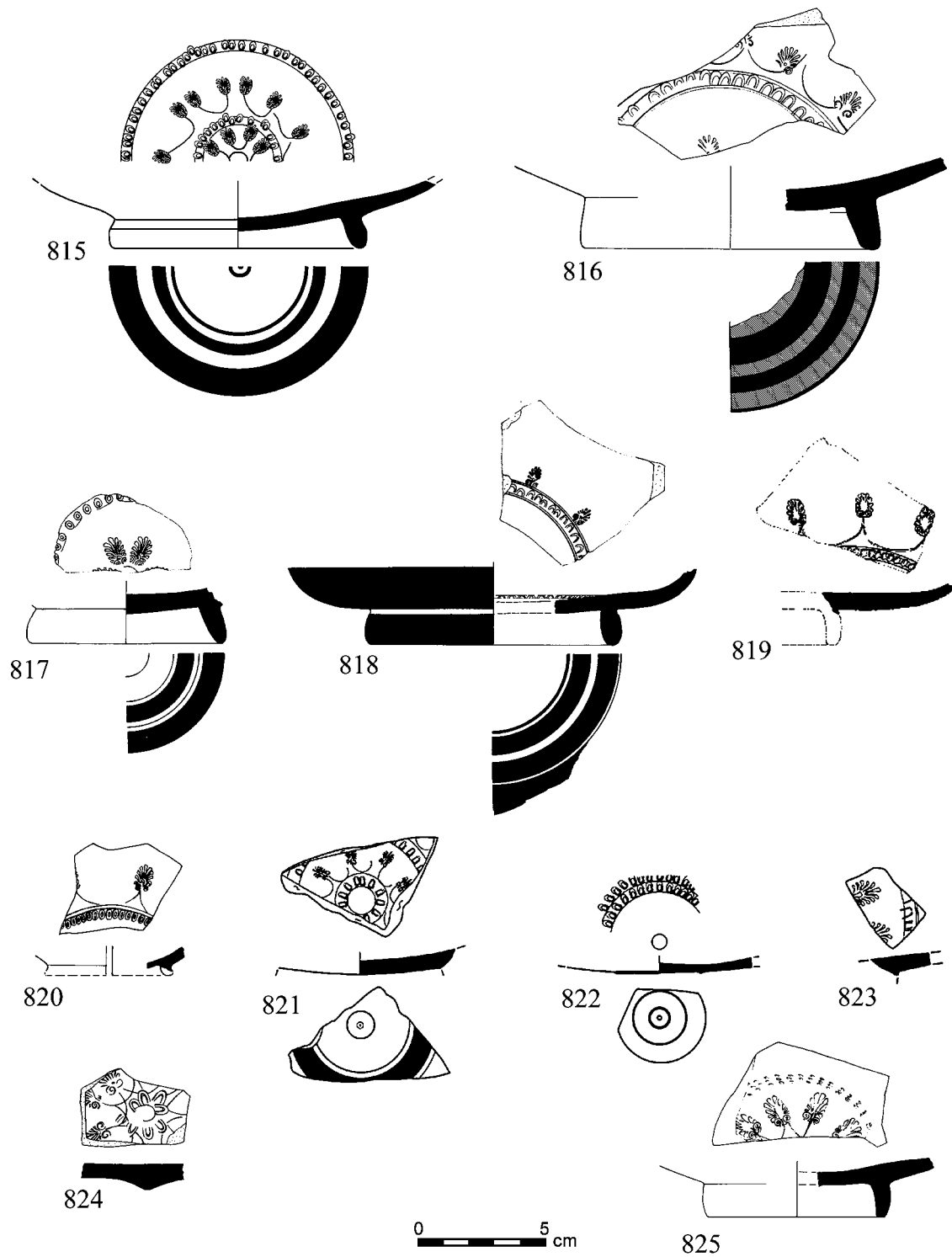


Figure 9.48. Black Glazed Decorated Bowl Bases (815–825).

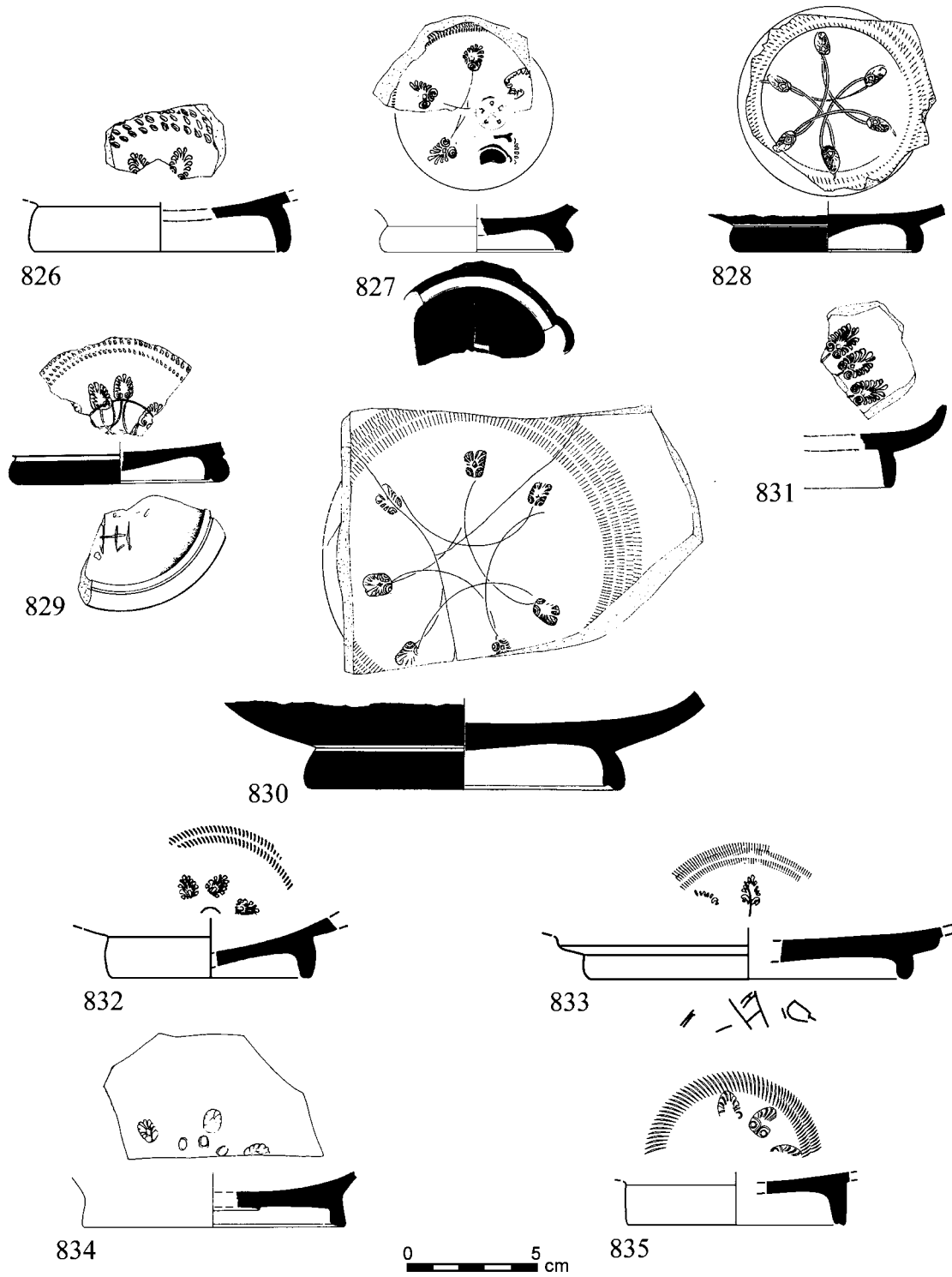


Figure 9.49. Black Glazed Decorated Bowl Bases (826–835).

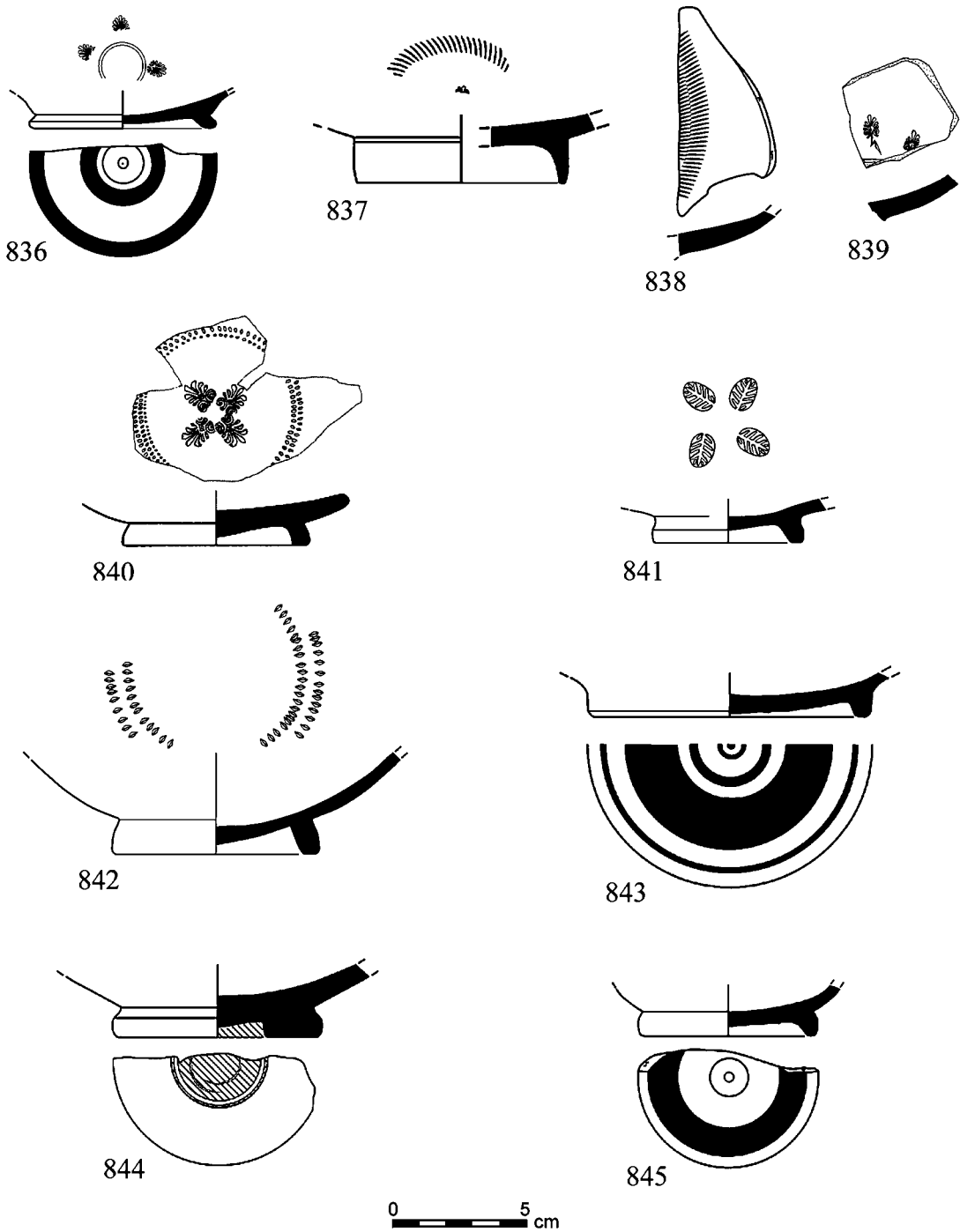


Figure 9.50. Black Glazed Decorated Bowl Bases (836–845).

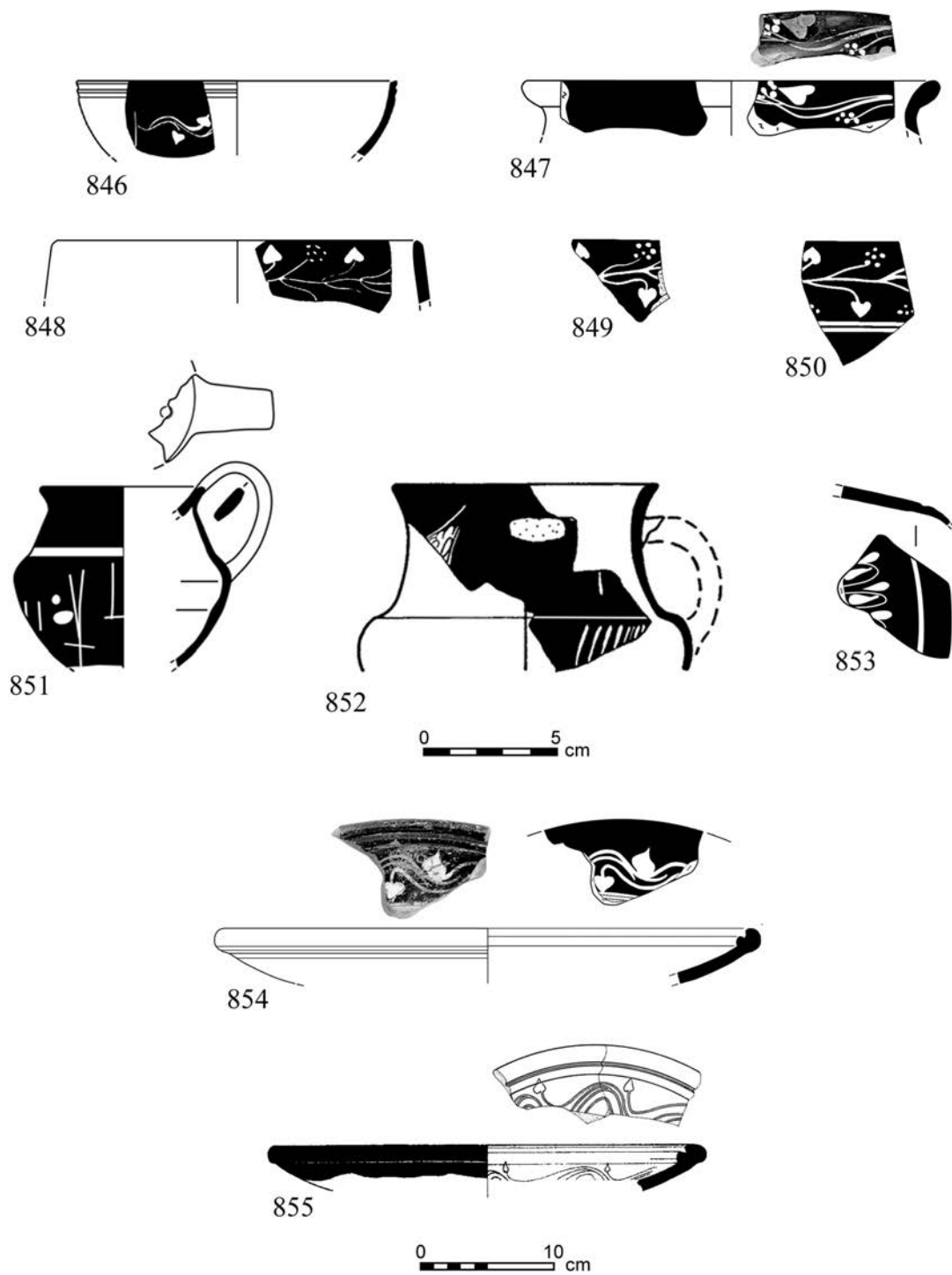


Figure 9.51. West Slop Technique Ware: Various Vessels (846–855).

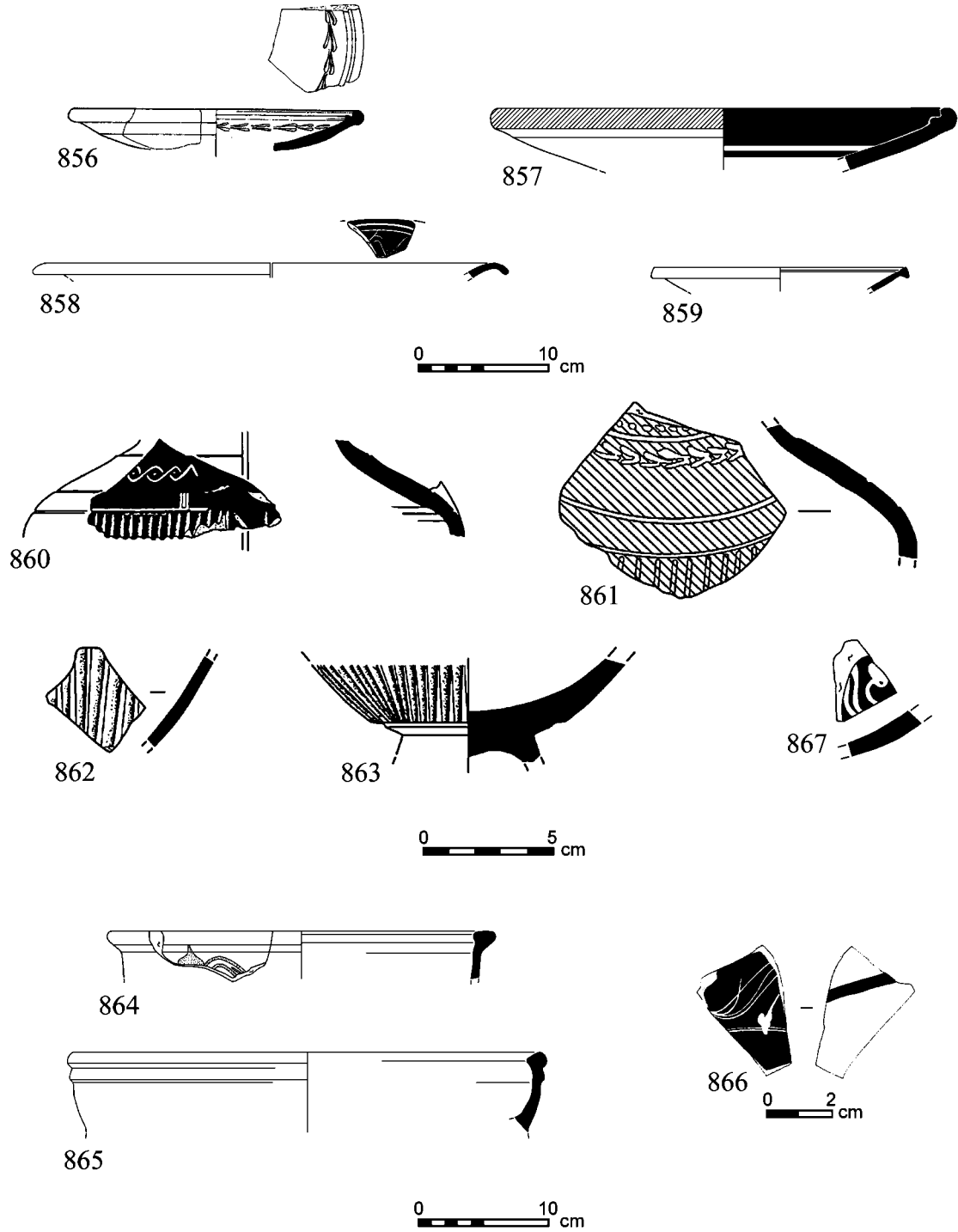


Figure 9.52. West Slope Technique Ware: Various Vessels (856–867).

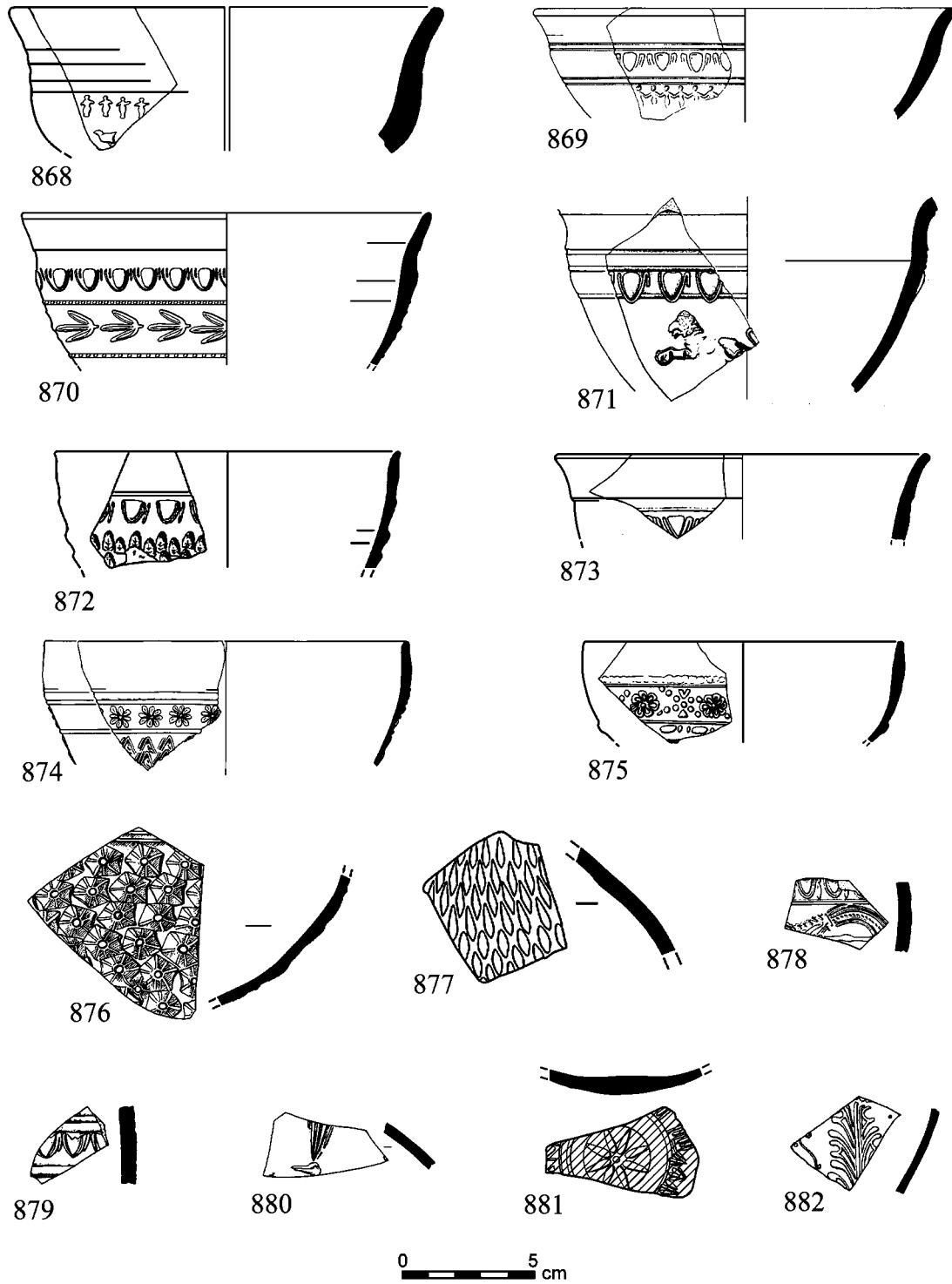


Figure 9.53. Mouldmade Relief Bowls (868–882).

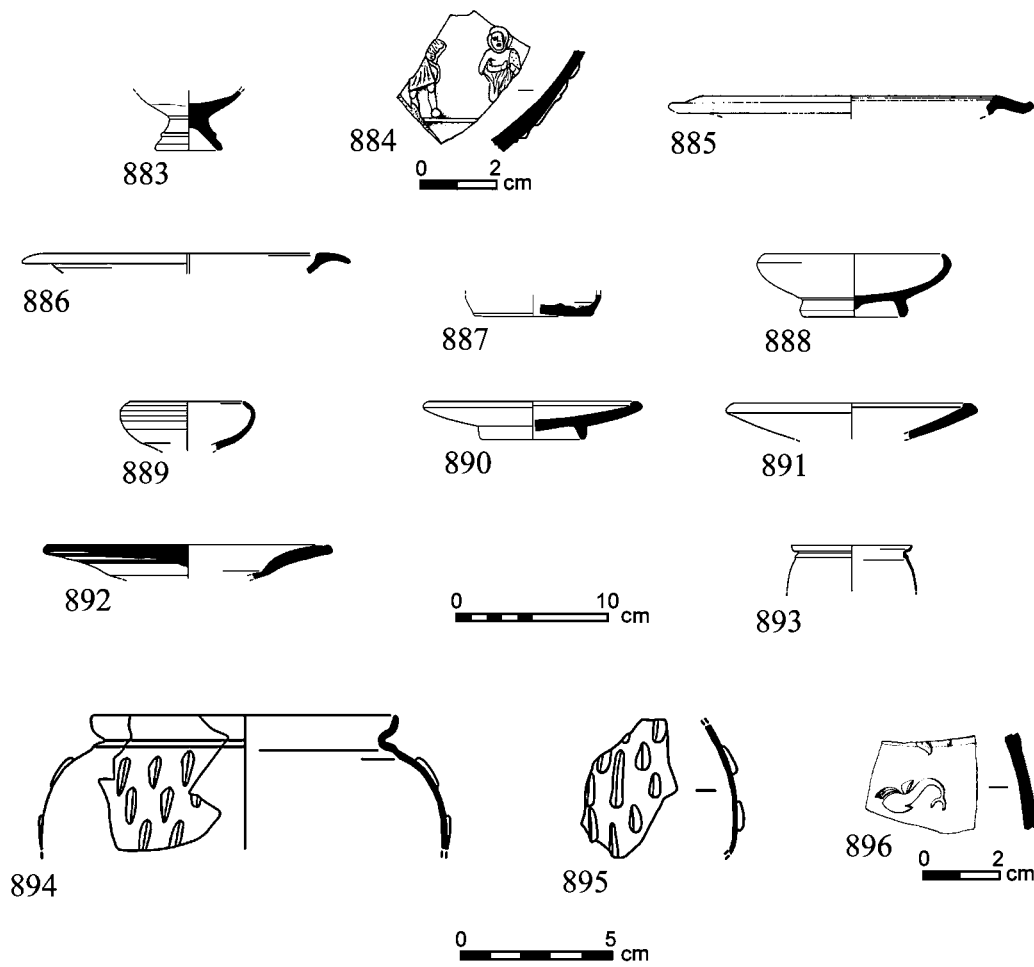


Figure 9.54. Hellenistic Table Bowls and Plates (883–892); Italic Thin Walled Vessels (893–896).

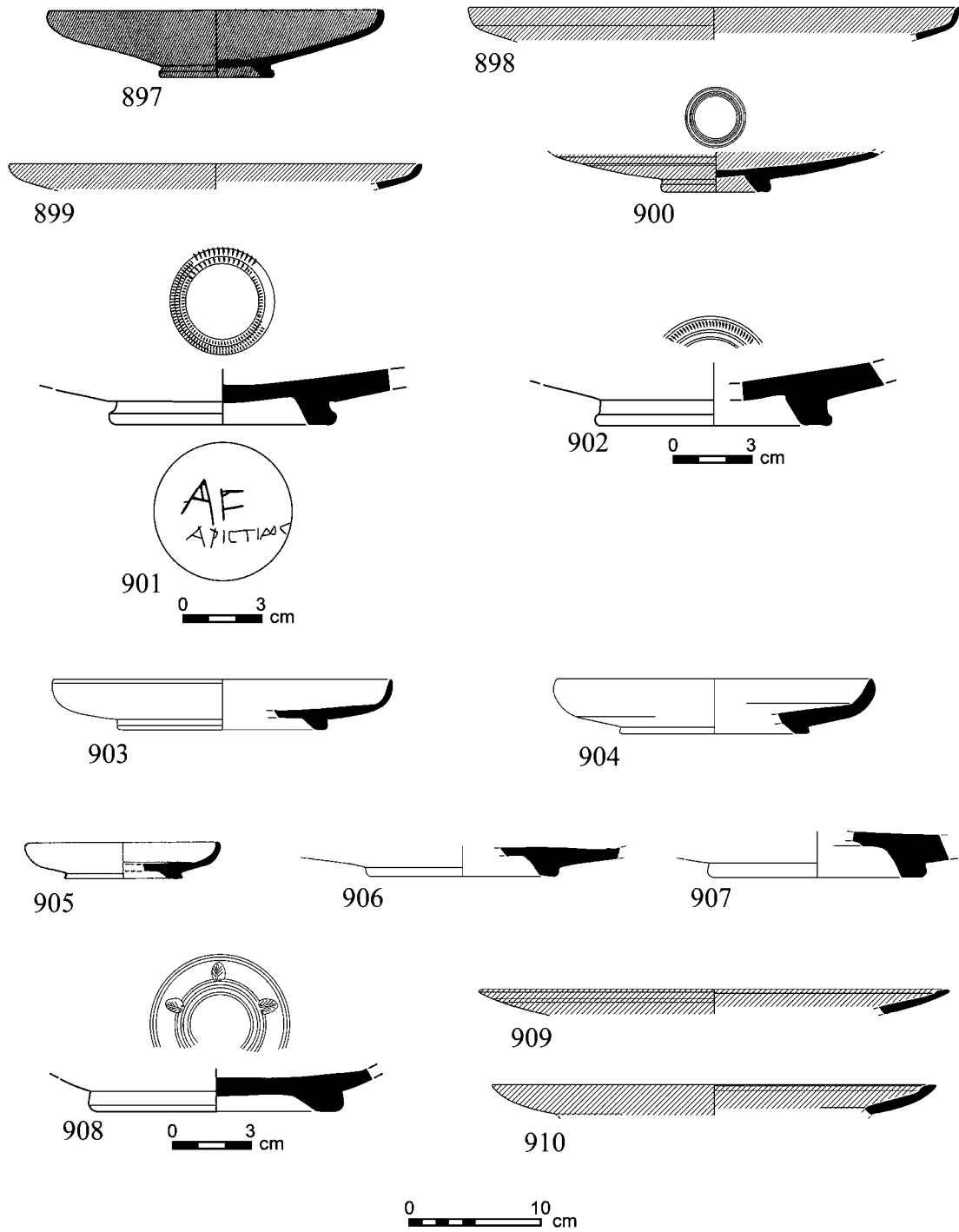


Figure 9.55. Eastern Terra Sigillata Bowls and Plates (897–910).

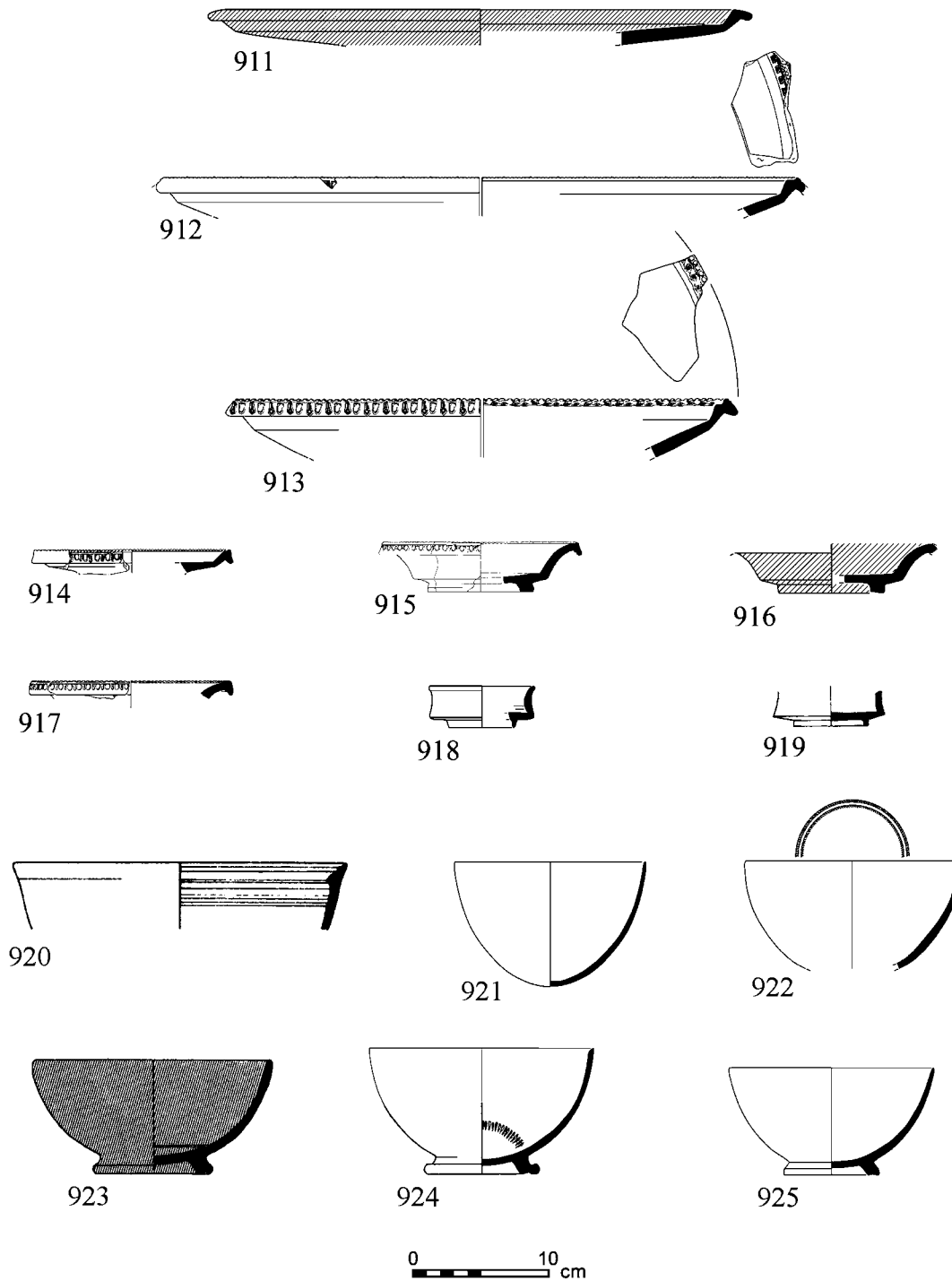


Figure 9.56. Eastern Terra Sigillata Bowls and Plates (911–925).

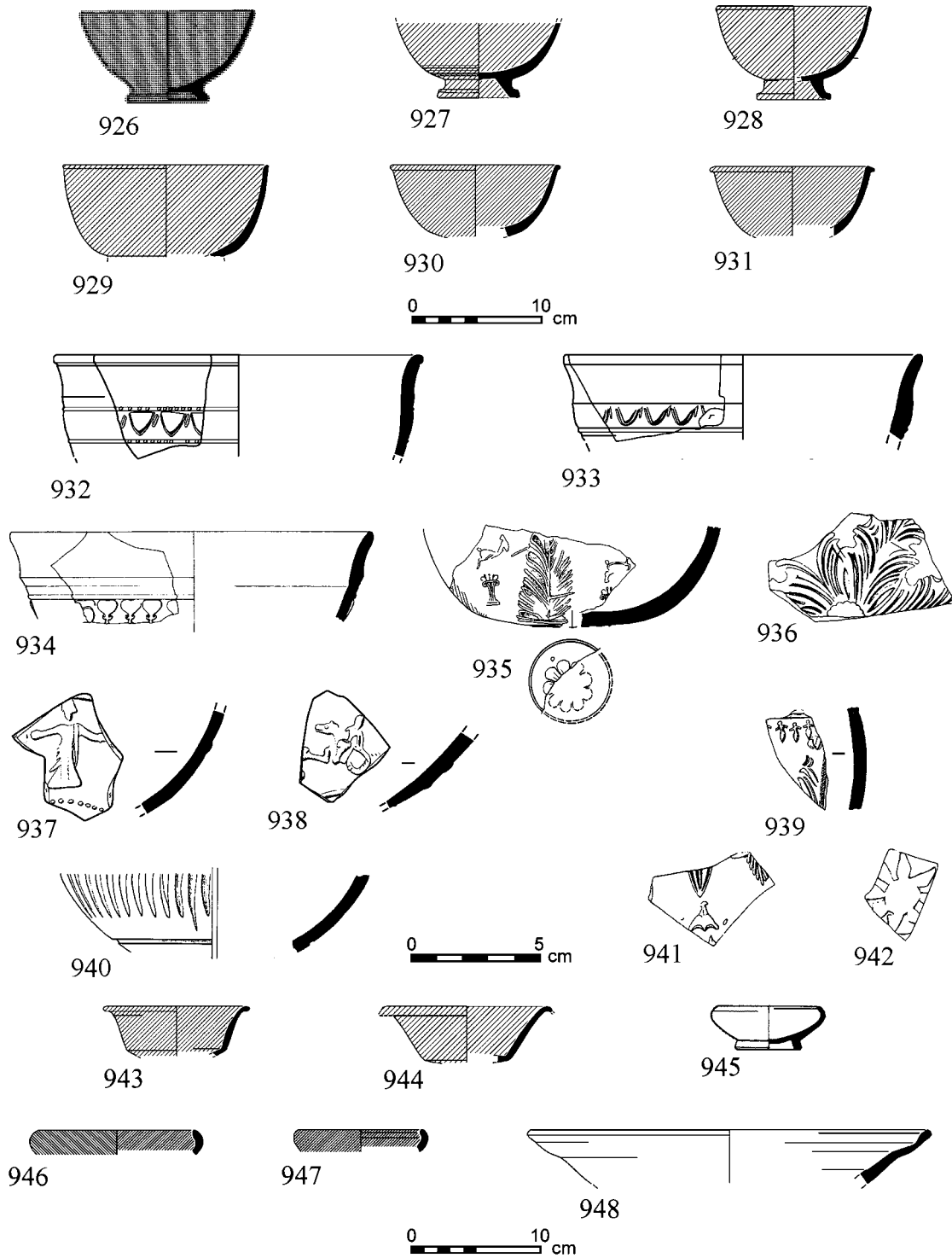


Figure 9.57. Eastern Terra Sigillata Bowls and Plates (926–948).

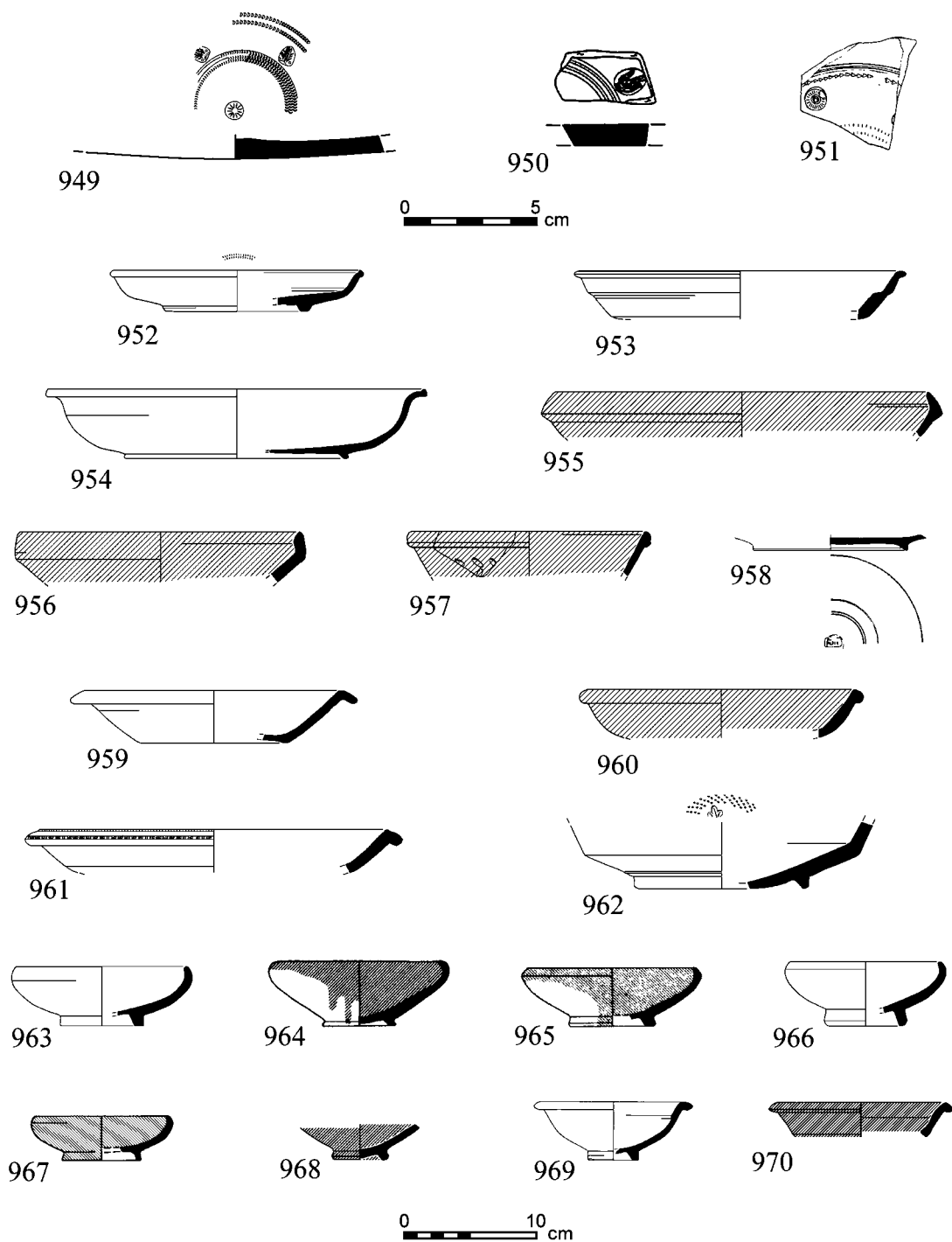


Figure 9.58. Eastern Terra Sigillata Bowls and Plates (949–951), Terra Sigillata B Bowls and Plates (952–958), Cypriot Terra Sigillata Bowls and Plates (959–970).

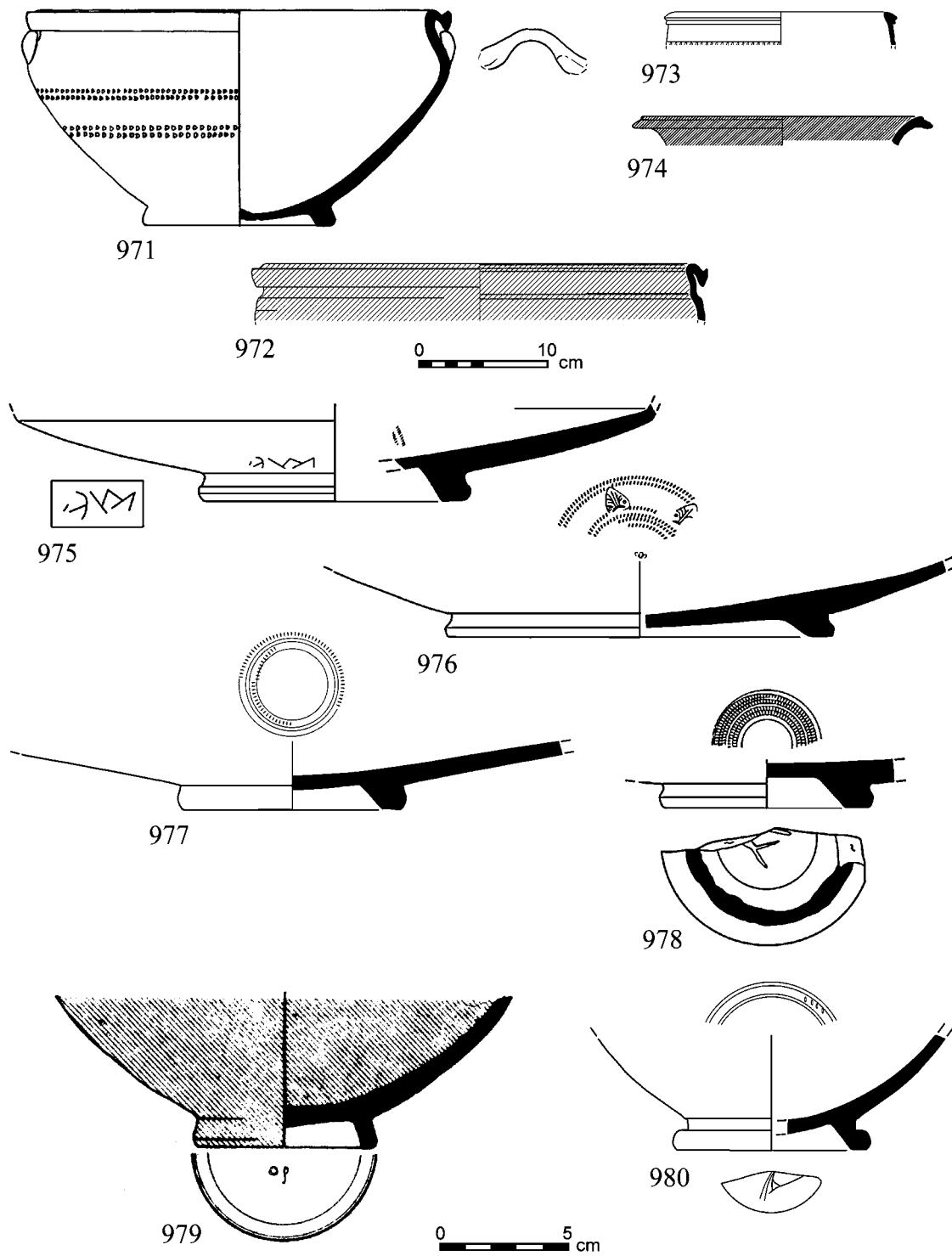


Figure 9.59. Cypriot Terra Sigillata Bowls and Plates (971–980).

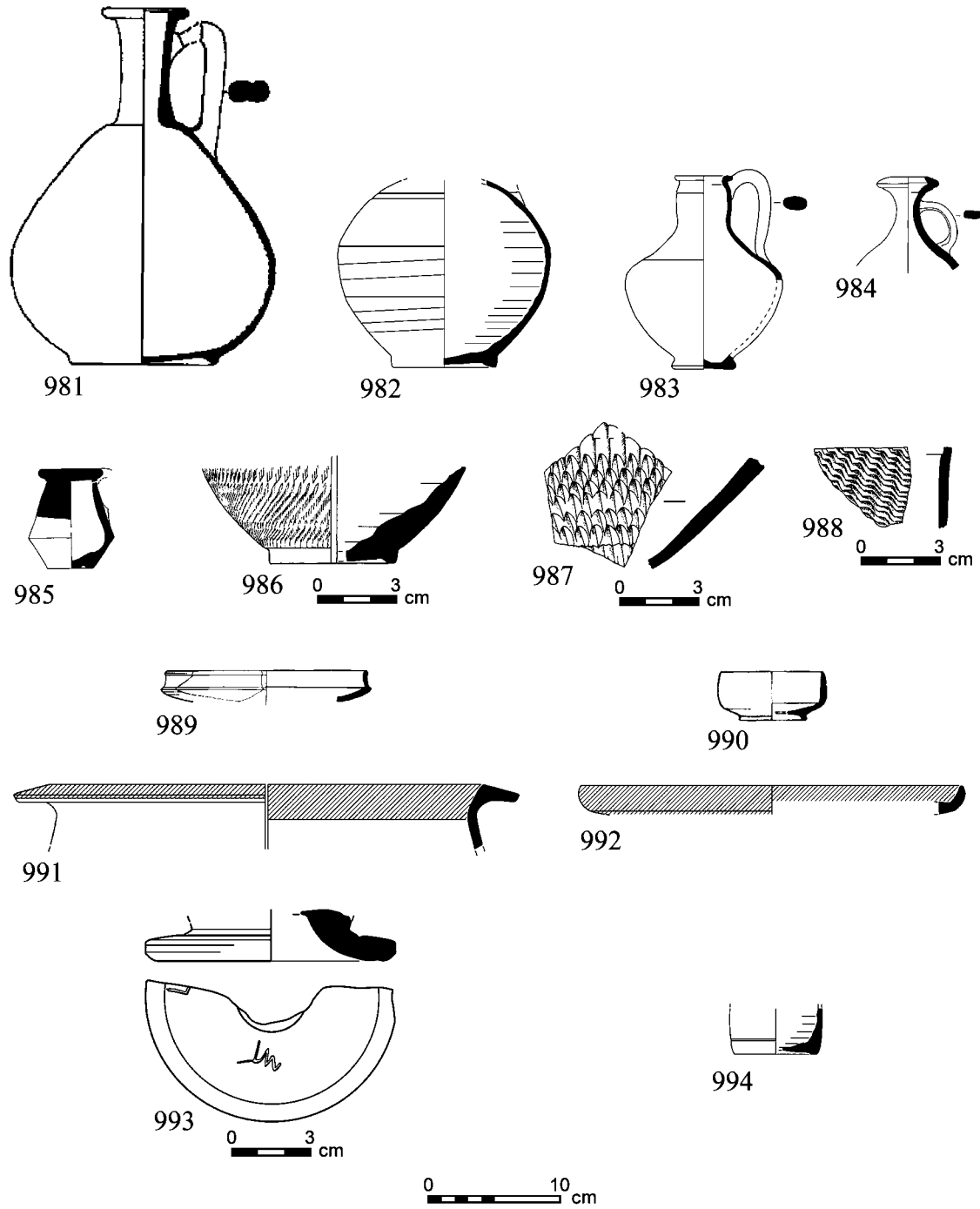


Figure 9.60. Cypriot Terra Sigillata and Pontica Sigillata Bowls and Plates (981–989), Western Terra Sigillata Vessels (990–994).

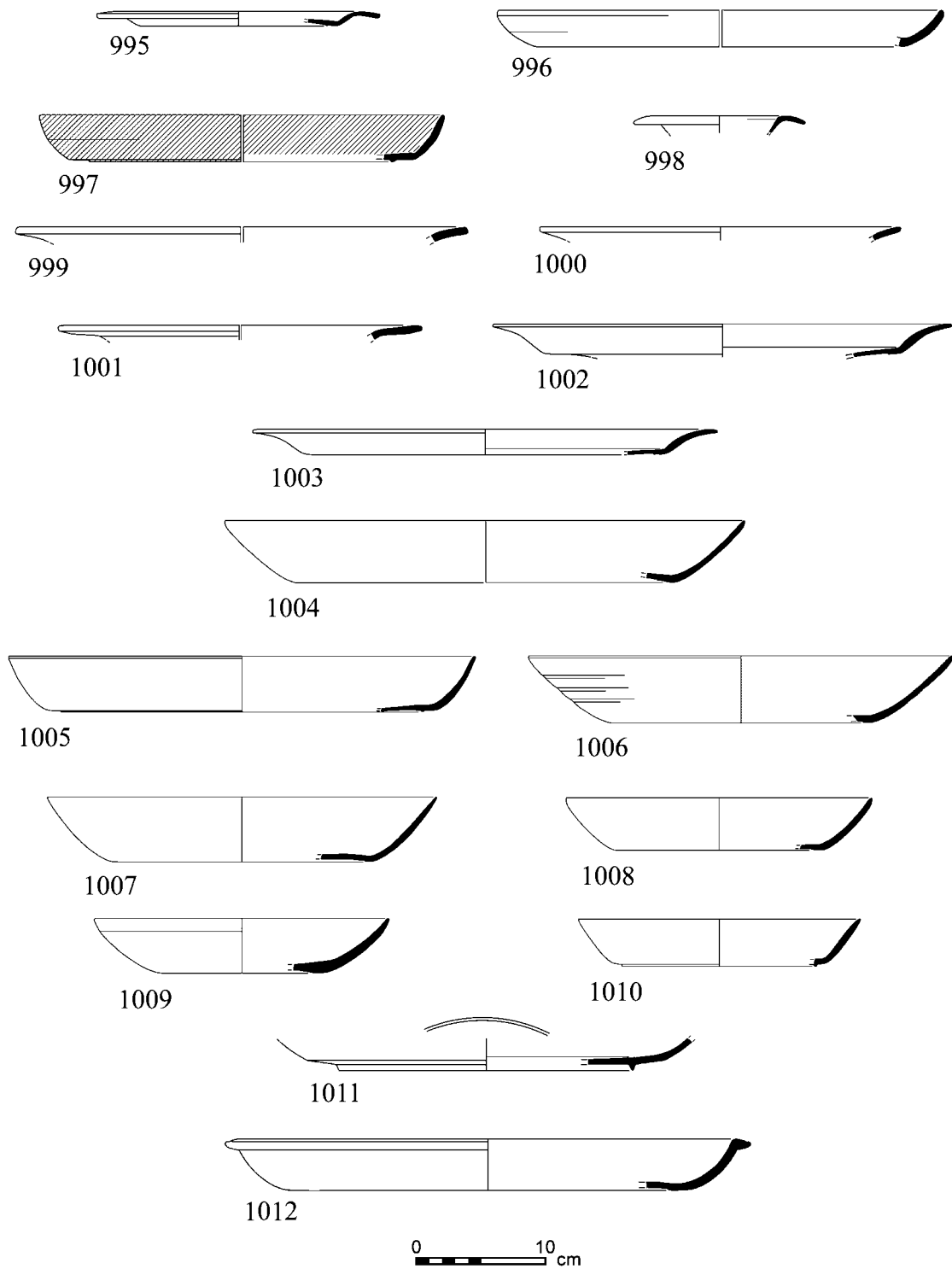


Figure 9.61. African Red Slip Bowls and Plates (995–1012).

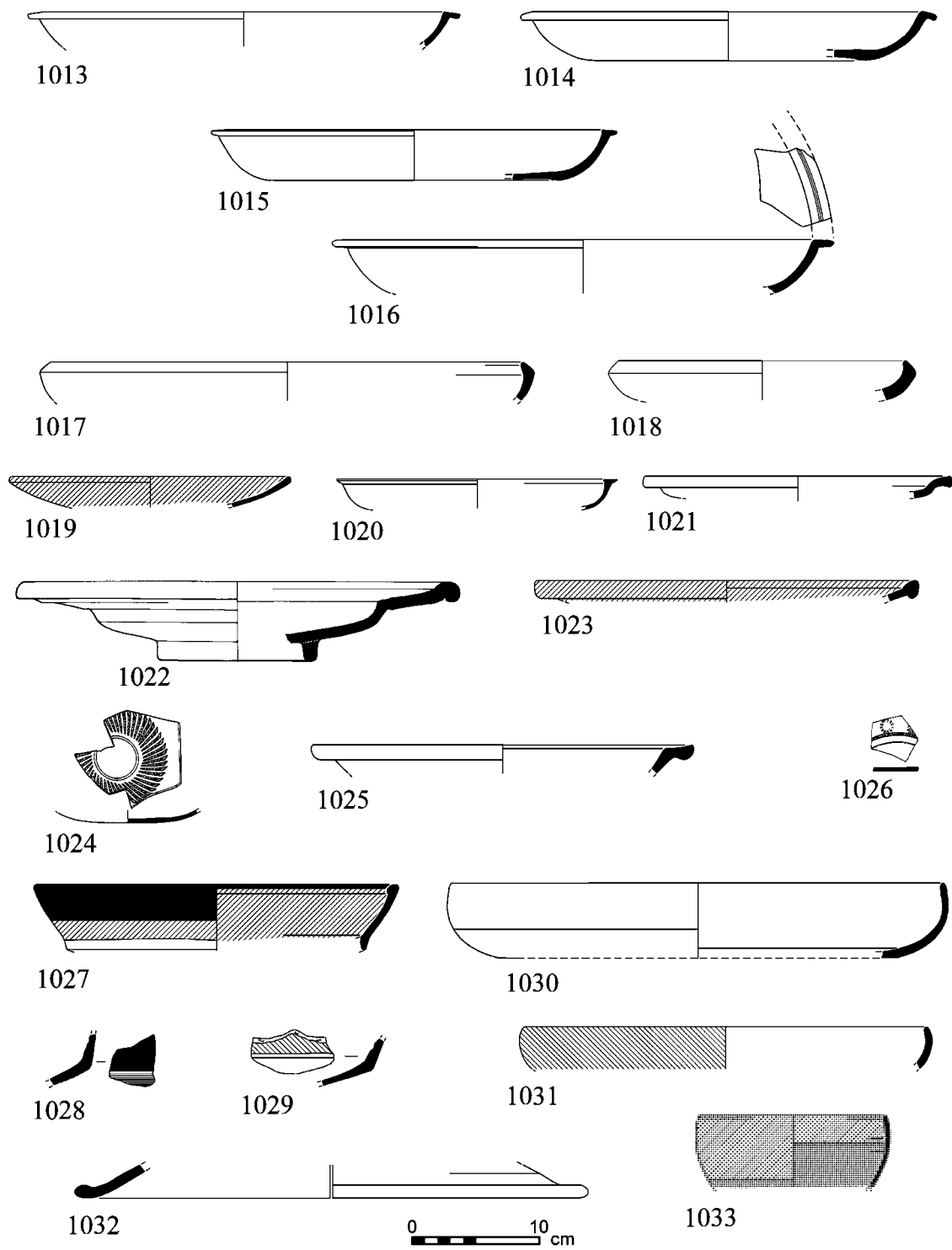


Figure 9.62. African Red Slip Bowls, Plates and Cooking Ware (1013–1033).

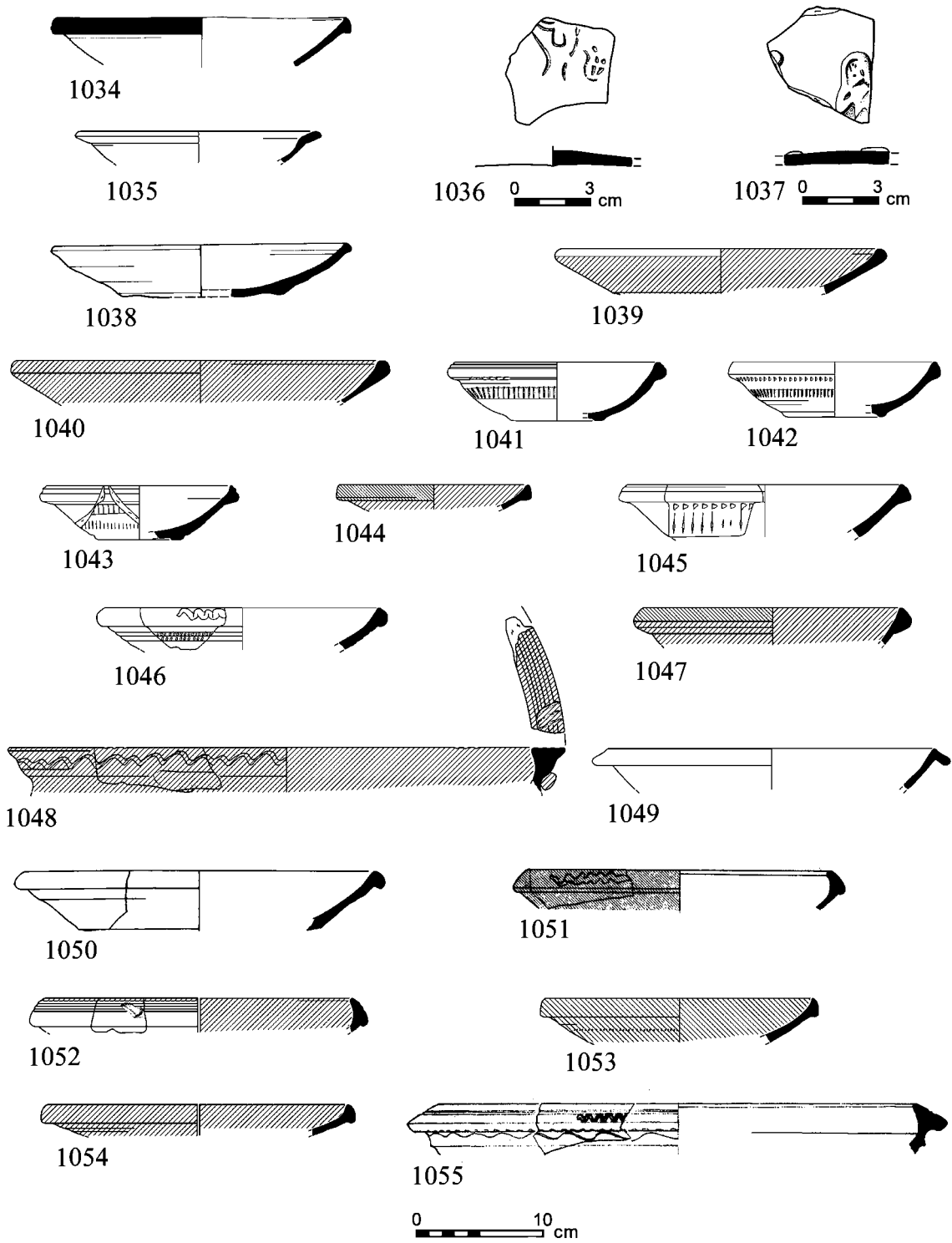


Figure 9.63. Phoenician Red Slip Bowls (1034–1055).

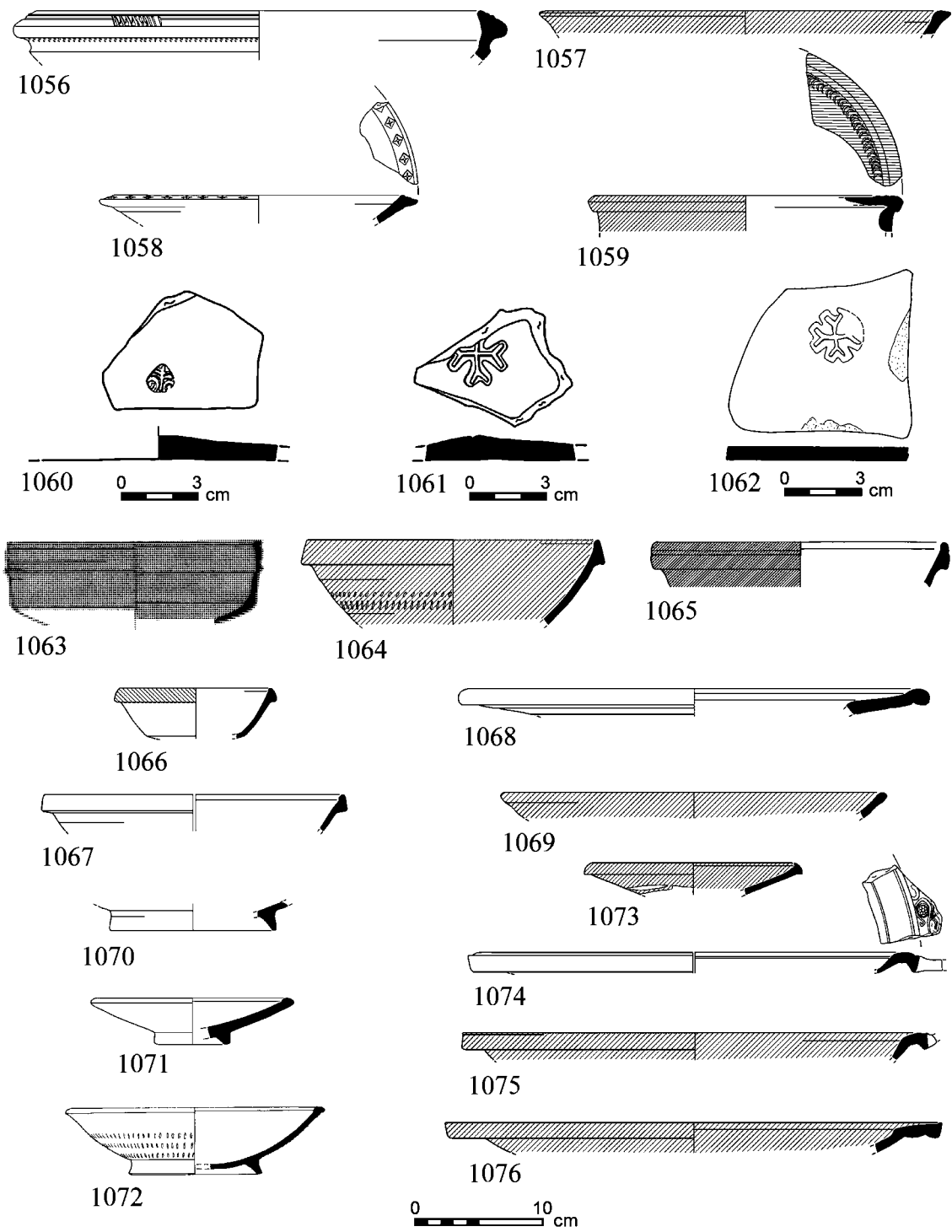


Figure 9.64. Cypriot Red Slip Bowls and Plates (1056–1062), Egyptian and Sagalassos Red Slip Bowls and Plates (1063–1076).

LAMPS

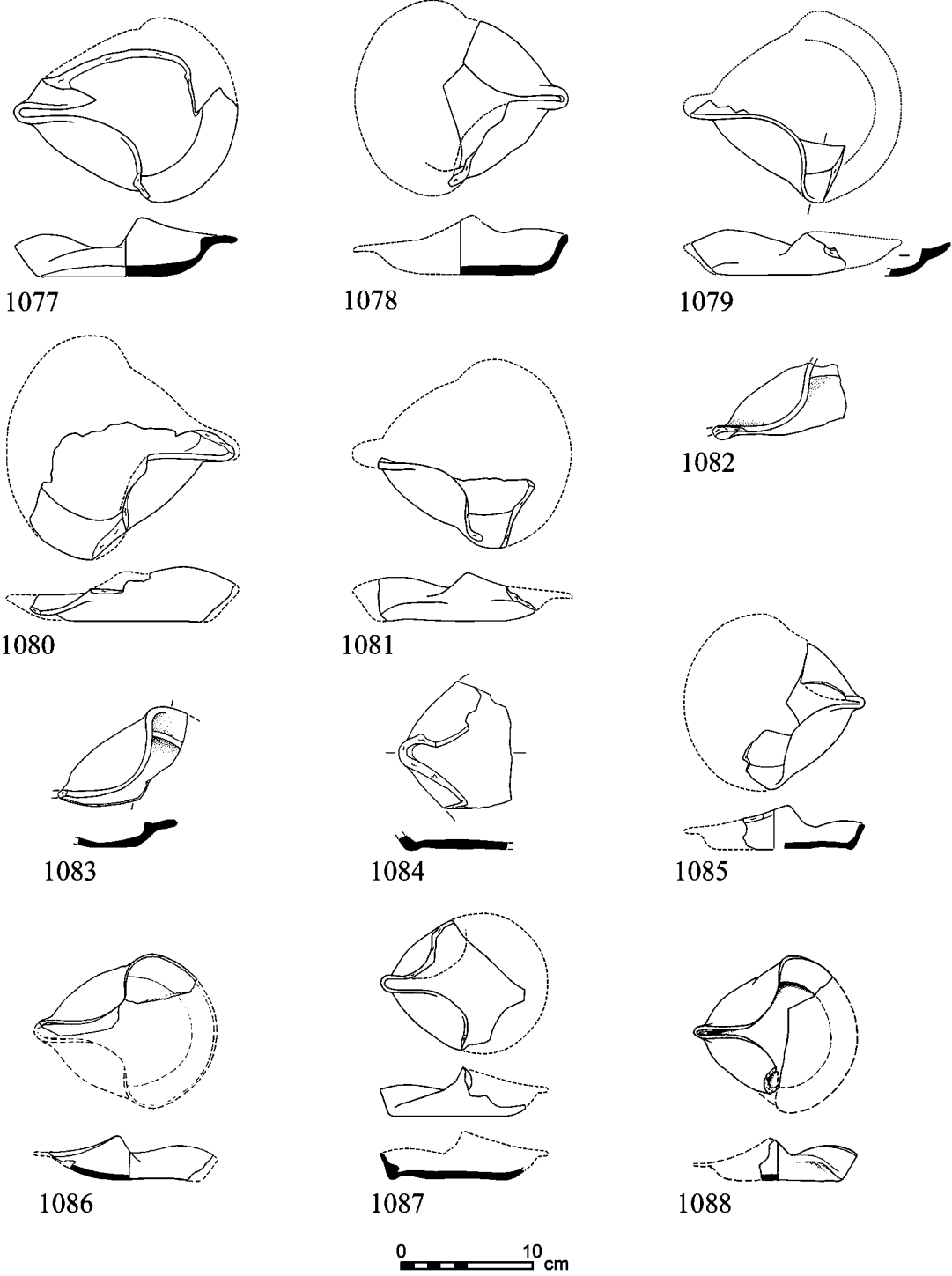


Figure 9.65. Persian Lamps (1077–1088).

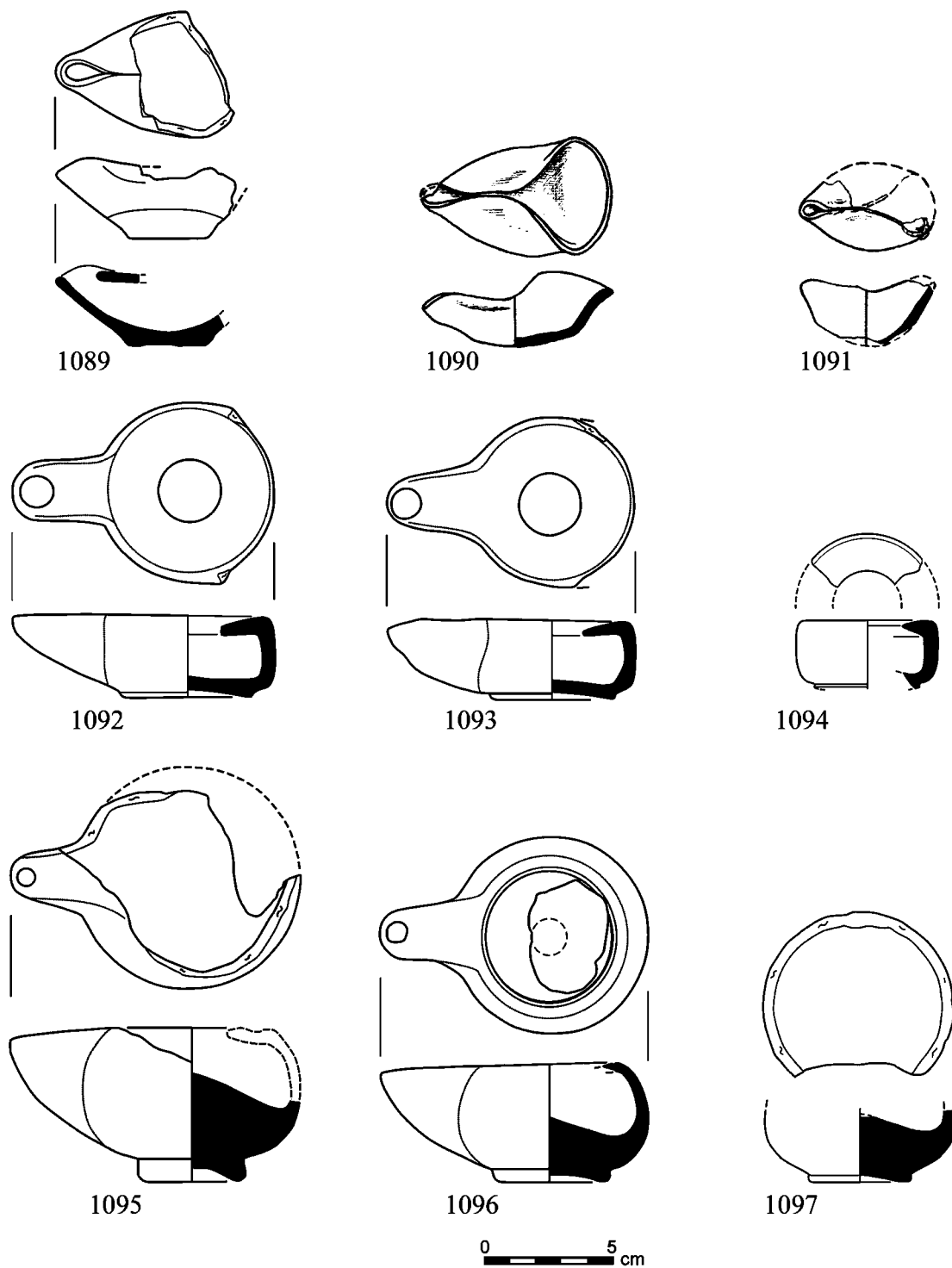


Figure 9.66. Hellenistic Folded Lamps (1089–1091), Imported Lamps (1092–1097).

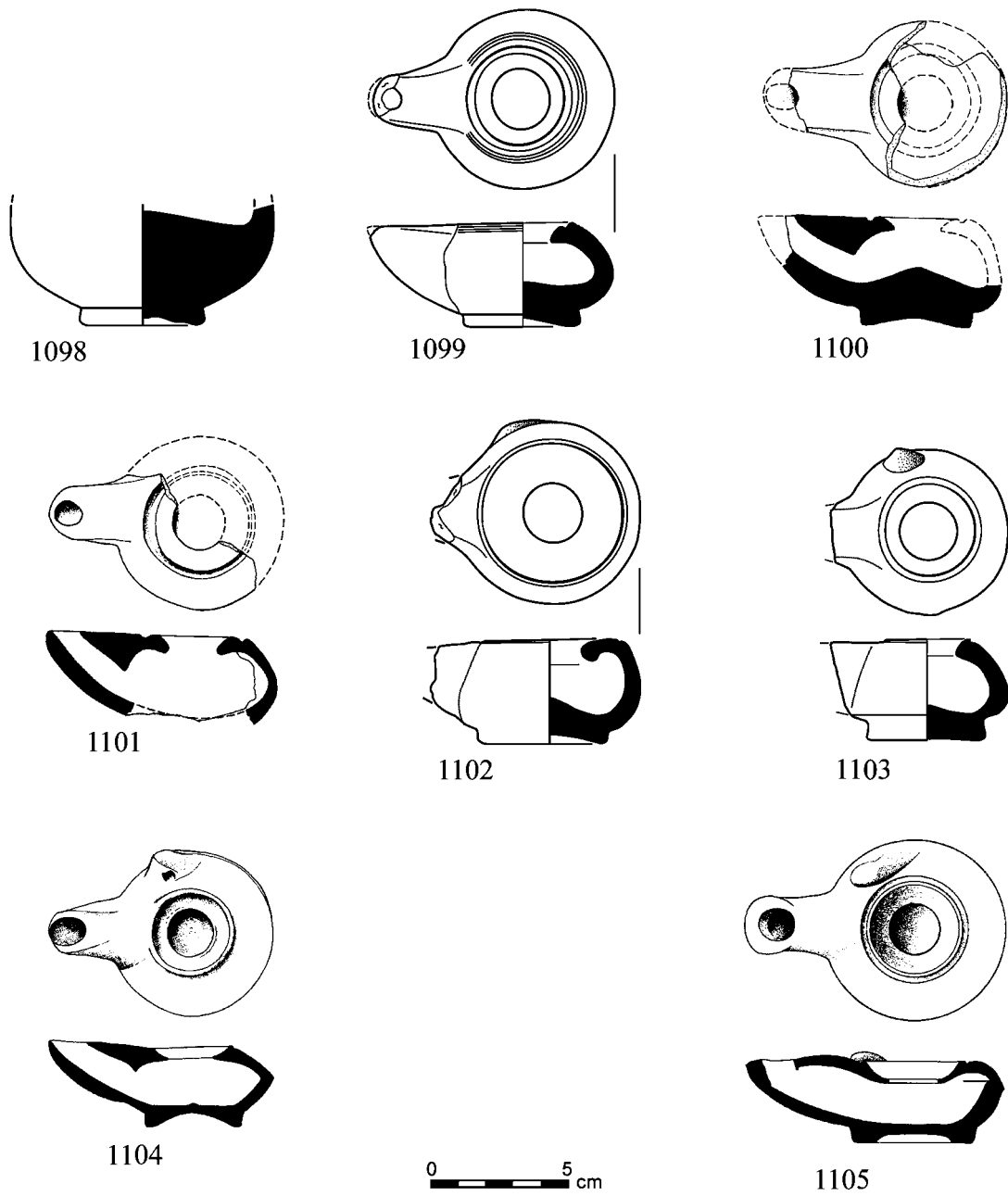


Figure 9.67. Greek Imported Lamps (1098–1105).

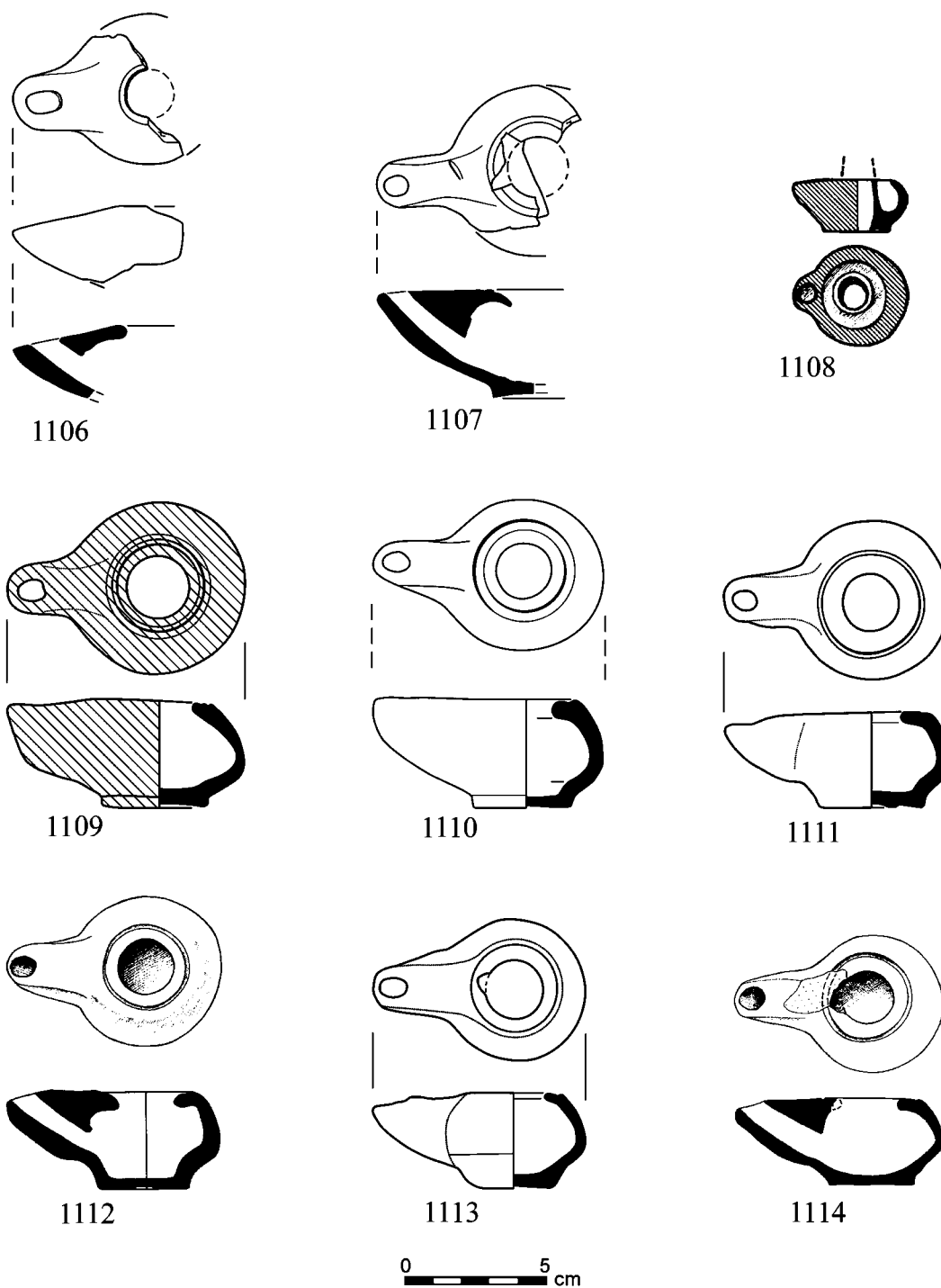


Figure 9.68. Hellenistic Lamps (1106–1114).

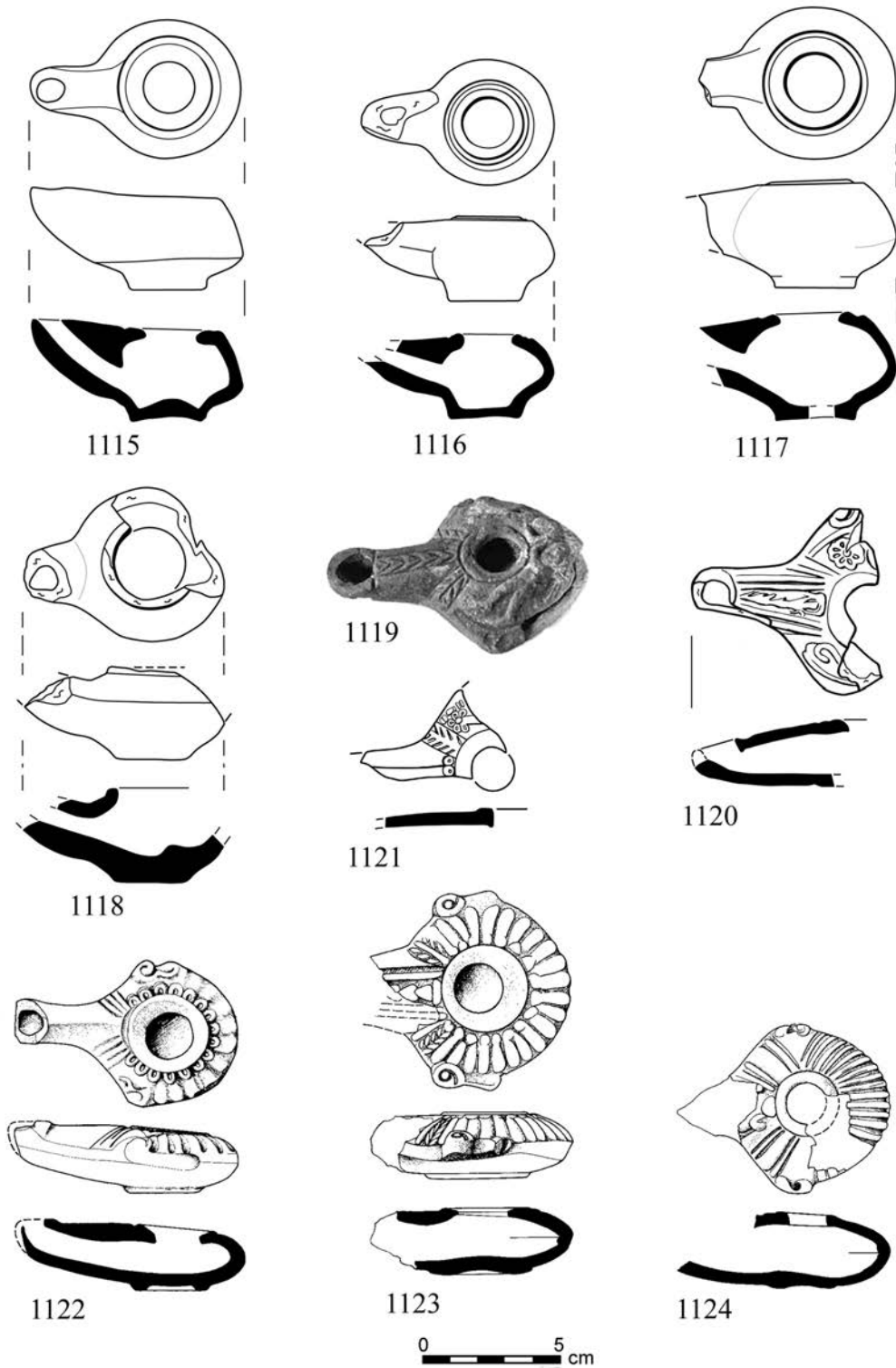


Figure 9.69. Hellenistic Lamps (1115–1124).

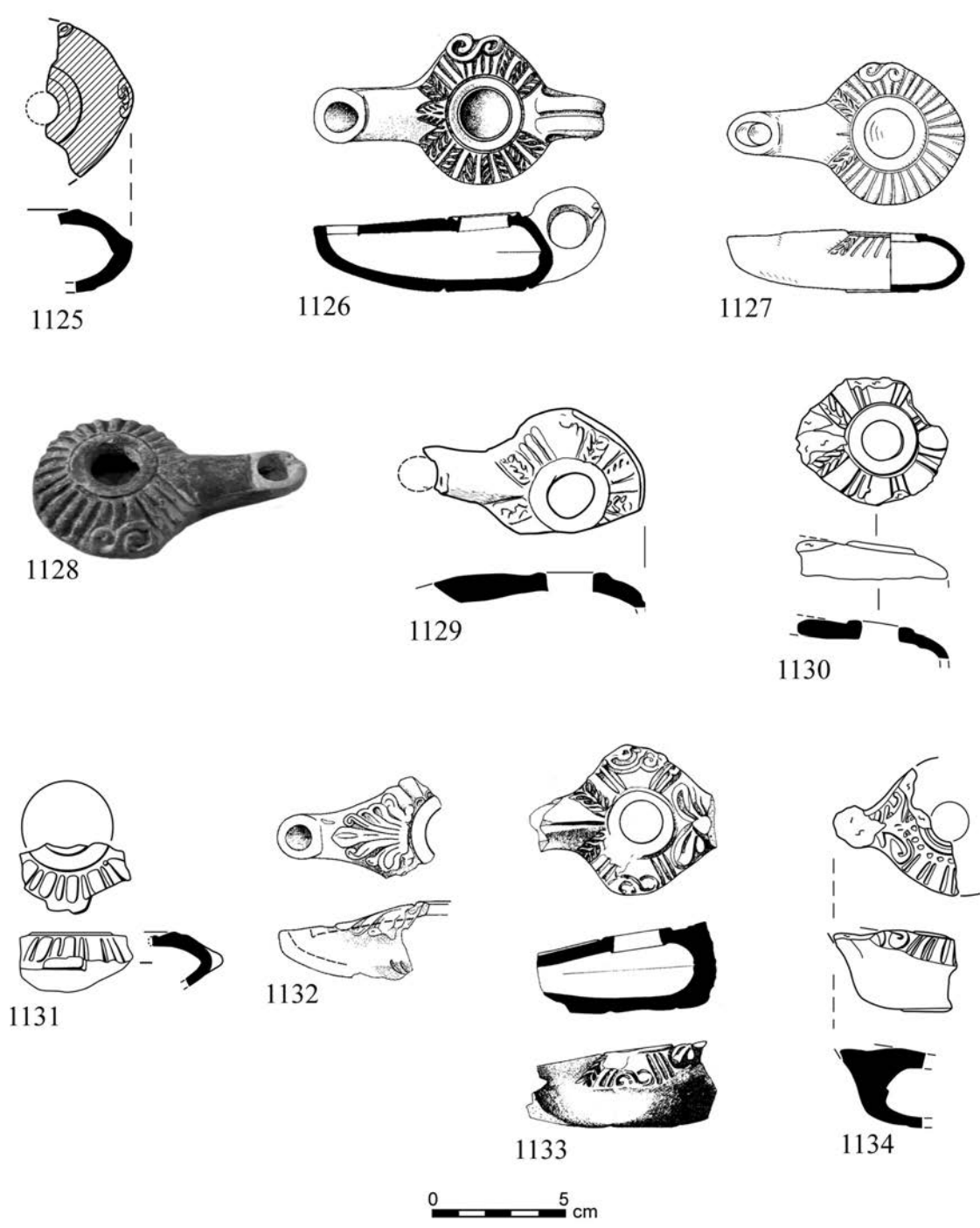


Figure 9.70. Hellenistic Lamps (1125–1134).

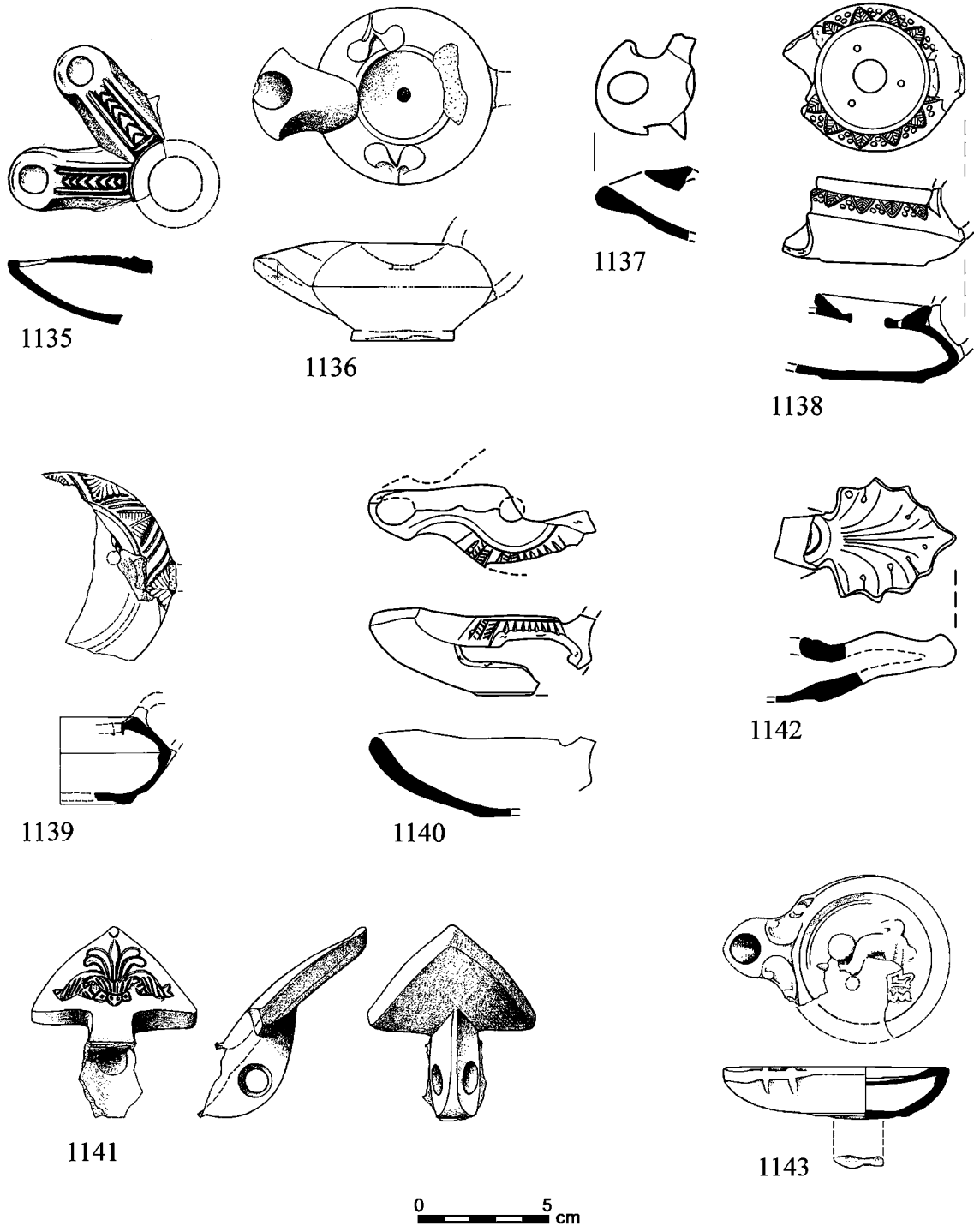


Figure 9.71. Hellenistic Lamps (1135–1140), Roman Imperial Lamps (1141–1143).

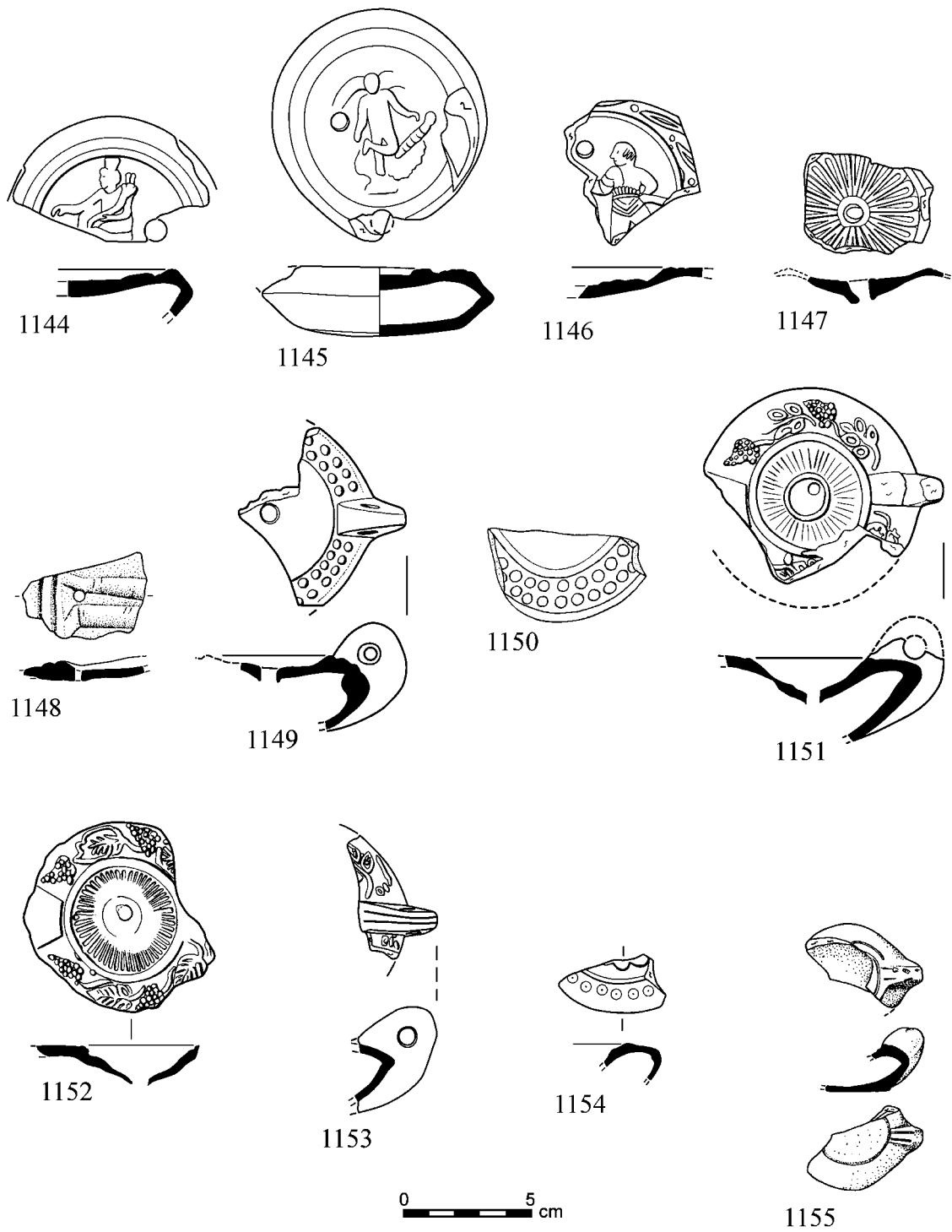


Figure 9.72. Roman Imperial Lamps (1144–1155).

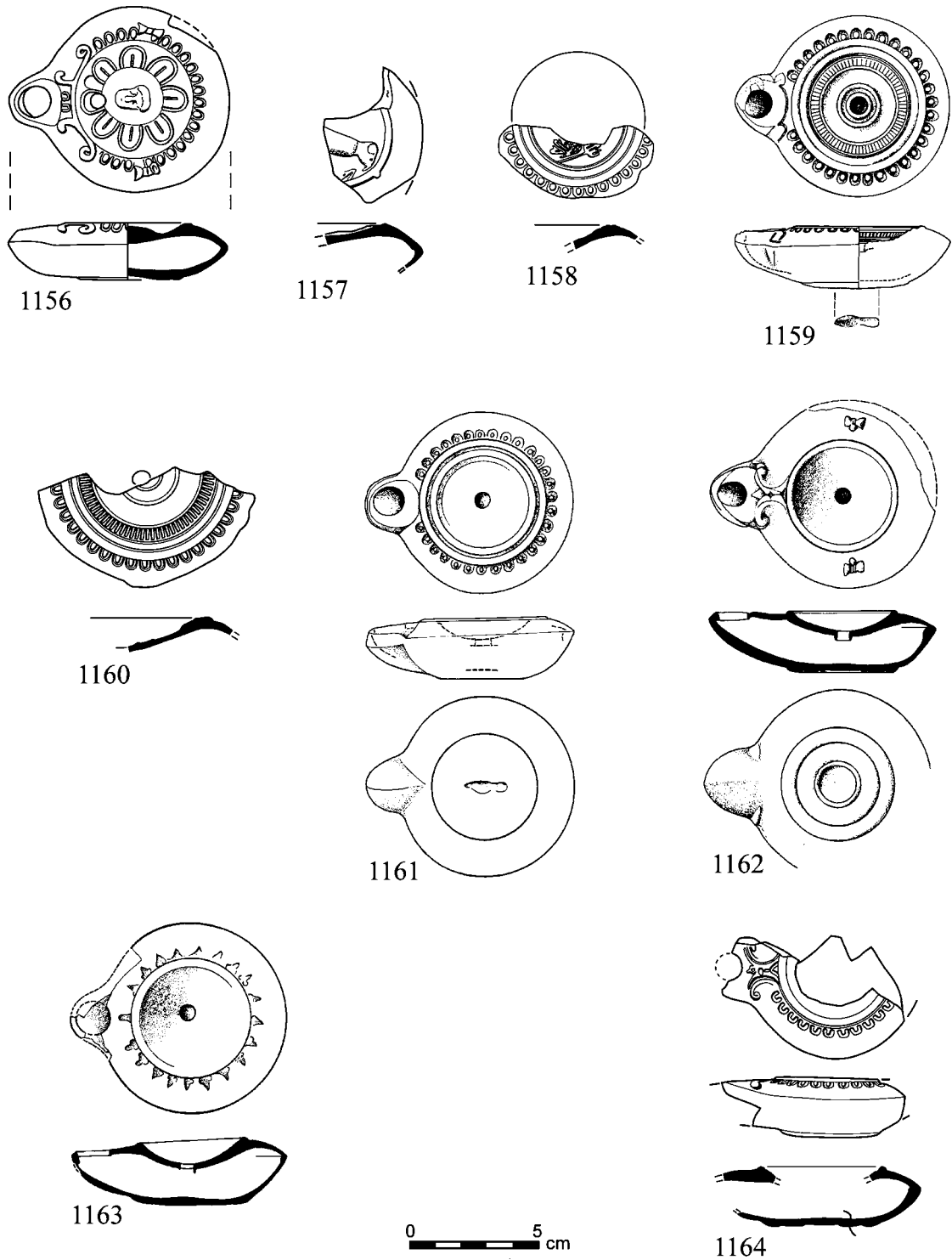


Figure 9.73. Roman Imperial Lamps (1156–1164).

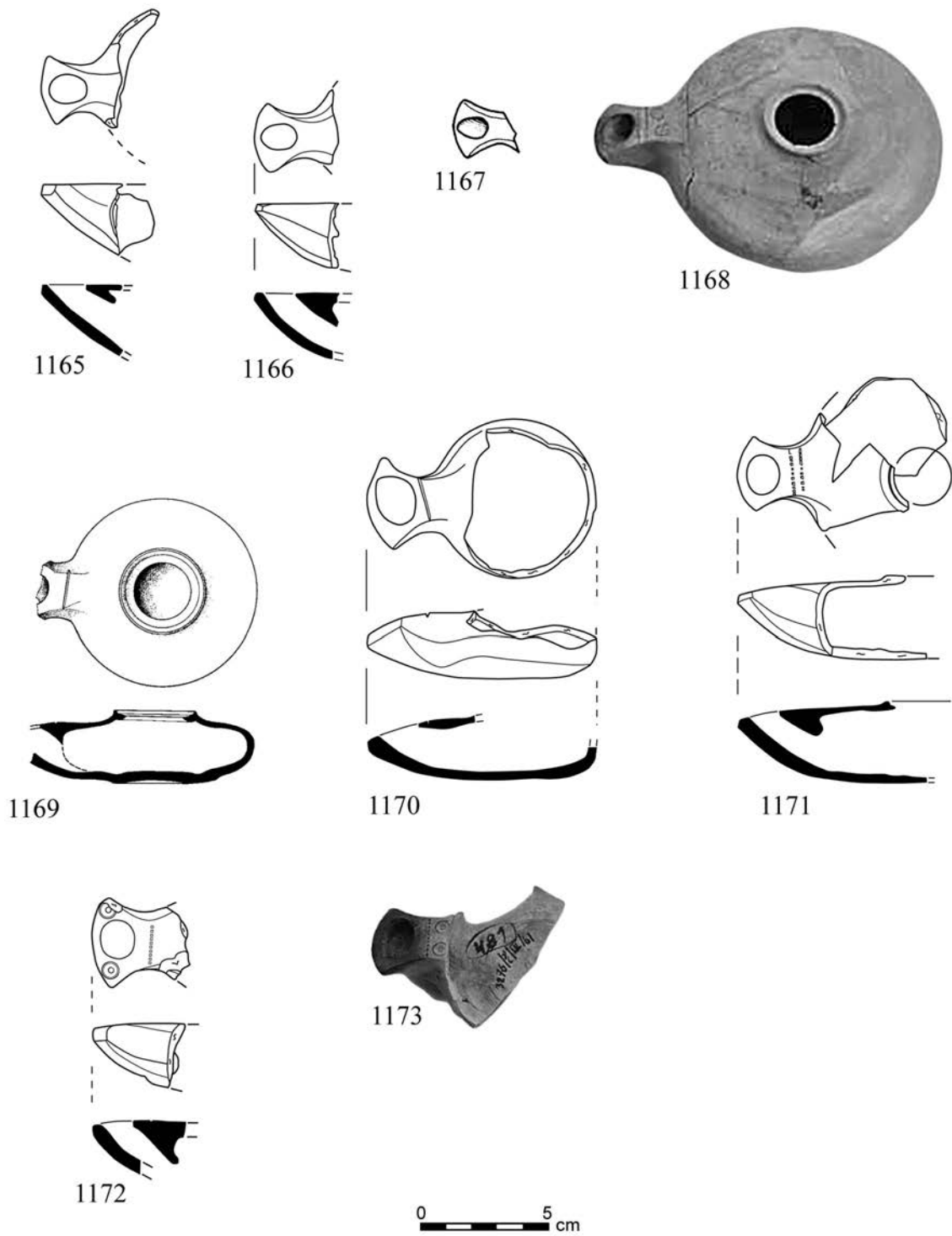


Figure 9.74. Herodian Lamps (1165–1173).

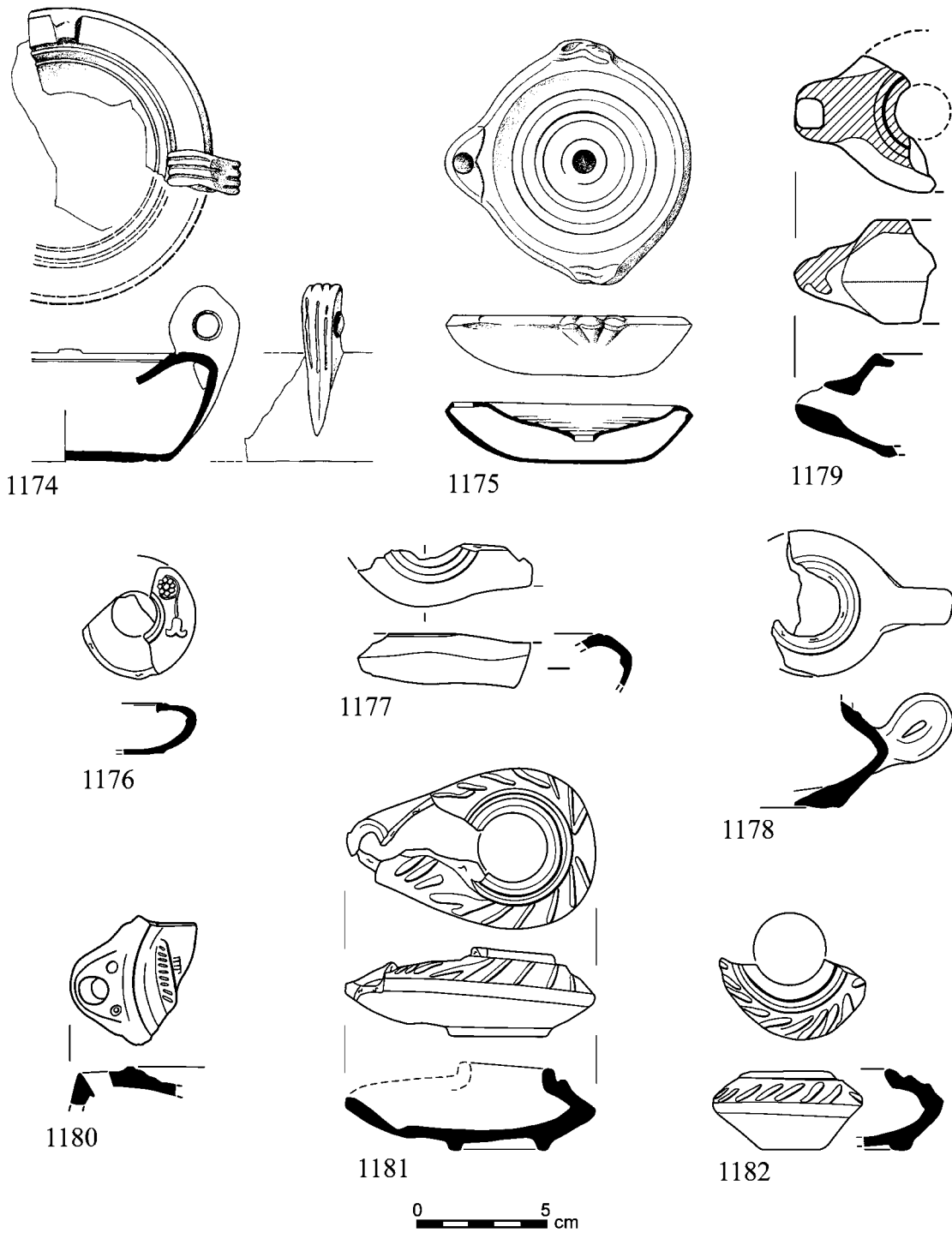


Figure 9.75. Roman Lamps (1174–1180), Byzantine Lamps (1181–1182).

MISCELLANEOUS

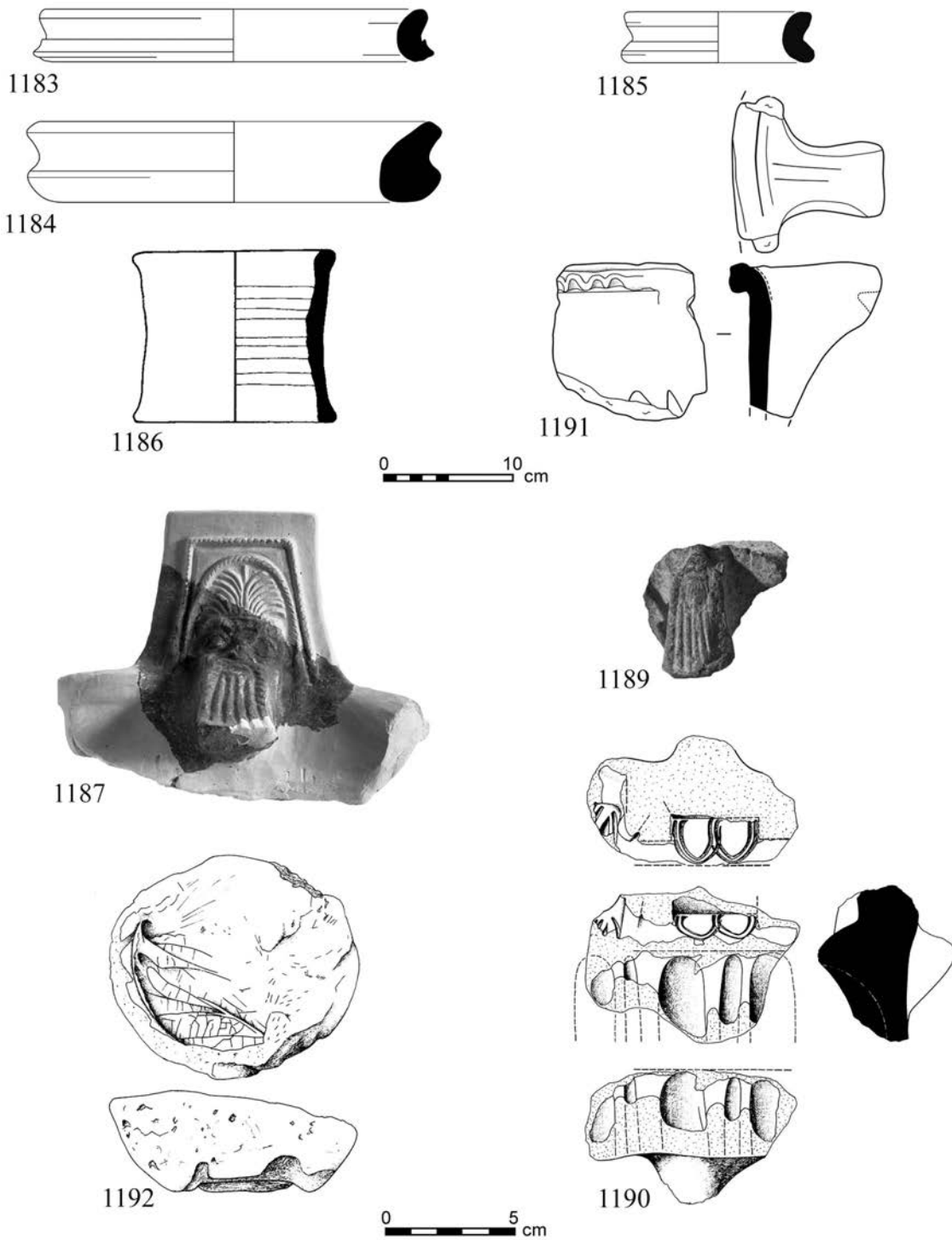


Figure 9.76. Miscellaneous (1183–1192).

Chapter 10. Roman Amphorae

Peter Gendelman

Kaplan's excavation in Jaffa provides a significant number of amphorae and amphora fragments dated to the entire Roman period.⁸⁵ The amphora assemblages represented in the following catalogue were collected mainly within two principal areas. The first group of amphorae was found in the Roman house in Area C and was dated from the Early to the Mid-Roman period. The second is associated with the refuse pit in Area A (see Chapter 5, pp. 77–78) and contains mostly 3rd and 4th century pottery fragments. Only a single Byzantine fragment was found in Area C.

The amphorae are from both Eastern and Western Mediterranean production centers together with amphorae from as yet unidentified provenance. This catalogue will present the types discovered in Jaffa in regional order. Each regional type will be discussed according to chronological order.

10.1. Eastern Mediterranean Amphorae

Egypt (Nos. 1–3)

Fragment of long neck amphora with massive rolled rim, made of distinct Nile Delta silt clay (1). This seems to be related with the Egyptian imitation of Rhodian type amphora dated from the end of 2nd to the 1st century BCE and even until the 1st century CE (Ballet 1995:15, fig. 9; Jaritz et al. 1996:126, fig.44:126; Arthur and Oren 1998:fig. 9:1).

Rim and base fragments (2–3) originated from the well-known *bitronconique* amphora of Type *AE4* (Empereur and Picon 1998:77, fig. 4) produced in several production centers in Egypt (Ballet and Dixnef 2004). This type of transport amphora is characterized by a conical base, elongated body and wide long neck, with a pair of loop handles connected just below the rim. These amphorae, dating from the 1st to the 4th centuries CE, are rarely found outside Egyptian boundaries (see as examples: Sciallano and Sibella 1994:87; Jurišić 2000:24–25, pl. 9:1–2; Zemer 1977:49, pl. 14:39).

1 Egyptian amphora

Reg. No. 79/G/64/070; Area G, Sq. 20, Bucket 80

Rim diam.: 13; Max h.: 8

Long neck amphora with massive rolled rim. Yellowish-red ware (5YR5/8), red-brownish slip (5YR4/4).

Many small white grits, hard fired.

Date range: late 2nd cent. BCE–1st cent. CE

2 Egyptian amphora

Reg. No. C/61/B152.2; Area C, Sq. DD100, Locus 414, Bucket 152

Rim diam.: 13.5; Max h.: 5

Rim fragment with part of single preserved handle. Brown ware and core (7.5YR5/2), many minute gold mica grits, medium fired with straw.

Date range: 1st–4th cent. CE

3 Egyptian amphora

Reg. No.504/C/IV/61; Area C, Bucket 87

Base fragment. Brown ware (7.5YR5/2) and light brown core (7.5YR6/4), a few small white grits, many minute gold mica grits, medium fired.

Date range: 1st–4th cent. CE

⁸⁵ The Hellenistic amphora and the Hellenistic amphorae stamped handles will be published separately by G. Finkielsztejn.

North Cyprus Syria and Cilicia (Nos. 4–22)

Several fragments of amphorae were found belonging to the well known type *Agora Form G199/ MR Amphora 4/Anemurium Amphora Type A* dated from the late 1st/early 2nd until the early 4th century CE (nos. 4–11)⁸⁶ (Robinson 1959:43, 75, 106, pls. 8:199, 16:11, 28:239; Riley 1979:186–187, fig. 83:236, 238; Williams 1989:91–95, figs. 54:548, 55:549–560). These barrel-shaped vessels are characterized by a short wide neck with a rolled rim, wide conical shoulder, a pair of short handles grooved and pinched on top, and a phalliform base in a high variety of toe forms. Such amphorae were produced in diverse fabrics in several regions of the southeastern coast of modern Turkey (Williams 1989:91–95) and in Cyprus (Hayes 1991:91–92, figs. XXXVIII:14, XXXIX:25, pl. 24:3–4, 6–8; Lund 2000). The main content seems to be Cilician and Cypriot raisin wine (Lund 2000; Rauh 2004). Such amphorae are frequently reported from Caesarea Maritima (Barnathan and Adato 1986:166, fig. 3:7; Oleson et al. 1994:21–22, 118, fig. 41:A85; Gendelman forthc. a),⁸⁷ and from other coastal sites of Israel such as Ashdod (Dothan 1971, fig. 13.1), Shiqmona (Elgavish 1977:72, pl. XX:156–157), and Dor (Guz-Zilberstein 1995:324, fig. 6.50:7) but are also known from inner parts of the country such as from Jerusalem (Hamilton 1944, fig. 22:1). Fragments from Jaffa belong to the two distinguished fabrics; one is pale colored and probably originated from Cyprus while the second, hard red colored, could be Cilician as well (for diverse Cilician red colored fabrics see Rauh 2004).

Three rim fragments of small carrot-shaped, narrow-footed amphorae with narrow neck, rolled rim, and a pair of flattened grooved handles connected to the upper neck (nos. 12–14). They are similar to 3rd–4th century CE *Qasrawet 2530* type of amphorae of proposed Cypriot or Aegean origin (Arthur and Oren 1998:201, fig. 5:9). On other hand, P. Reynolds speculated that the *Qasrawet 2530* amphorae were produced in the Ras al-Basit area in northern Syria (Reynolds 2005:567, fig. 44).

Rim fragments were found of carrot-shaped amphorae with carinated shoulder, cylindrical high neck with rolled rim, curved oval handles with deep groove on exterior that connect the upper neck to the upper shoulder (nos. 15–16). They are similar to the 2nd century CE *Hayes Type II* (Hayes 1991:91, fig. 70:12, pl. XXIV:2) and *Marquié Type I* (Reynolds 2005:569, fig. 67). Such amphorae are known from Caesarea (Oleson et al. 1994:21, 91, 118, figs. 27:A51, 41:A80; Gendelman forthc. a) and Cosa (as *Will Form 12b*: Will 1987:205–207, figs. IX:399–404).

Several handle fragments were found belonging to amphorae with a barrel-shaped body, pointed base, rolled rim settled directly on narrow rounded shoulder and two horned double rod handles connecting the upper part of shoulder to the middle of the body (nos. 17–20). They are similar to *Agora M54* dated from the 1st to the 2nd century CE (Robinson 1959:35, 89, pls. 58:126, 19:M54) and *Hayes Type 46* (Hayes 1983:158, fig. 26:103). Such amphorae seem to have been produced in eastern Cilicia (Reynolds 2003:125, fig. 15a–b) and distribute along Levantine coast as far as Paphos (Hayes 1991:93, fig. 68:d, e top, pl. 25:3), Caesarea (Gendelman forthc. a) and Alexandria (Empereur 1998, fig. 11).

The complete vessel and rim fragment of type of small amphorae have a flat base near a globular body, conical wide neck, incurved flattened rim with a secondary molding below, a pair of curved handles grooved on top connected from the neck below the rim to the upper body (nos. 21–22). The vessels from Jaffa are a flat-bottom variation of the east Cilician Type *Pompeii V* (Reynolds 2003:125–126, fig. 17a). The standard hollow foot variation of these amphorae was produced in Acrocorinth (Slane 1990:109–110, 113, fig. 28:237), Alexandria (Empereur 1998, fig. 10), Beirut (Reynolds 2003:125–126, fig. 17b–d), and Caesarea (Gendelman forthc. a). The date of the standard variant is from the late 1st (based on Pompeii prior to 79 CE) to the sec2nd and centuries CE. The flat base variation could be earlier, e.g. from the 1st century BCE to the mid-1st century CE according to fragments that came from a well stratified location at Caesarea (Gendelman forthc. a).

4 Amphora fragment

Reg. No. 79/C/61/438; Area C, Buckets 604, 609, and 610

Rim diam.: 11

⁸⁶ The amphora presented in fig. 1:4 was previously published (see Kaplan 1964:6–7, fig. 2.3, pl. 4.8).

⁸⁷ A complete vessel was discovered at sea between Caesarea Maritima and Atlit (Zemer 1977: no. 41).

Outcurved thickened rim, short neck, rounded shoulder, two pinched angled handles attached from below the rim to the shoulder. A few minute gray grits, very pale brown ware and core (10YR8/3), a few minute gray grits, self slip, hard fired.

Date range: late 1st/early 2nd – early 4th cent. CE

5 Amphora fragment

Reg. No. C/61/B304.1; Area C, Bucket 304

Rim diam.: 13; Max h.: 6

Outcurved thickened rim, high neck and two handles. Red ware and core (2.5YR6/6), very pale brown wash (10YR7/4), a few medium white and red grits, hard fired.

Date range: late 1st/early 2nd – early 4th cent. CE

6 Amphora fragment

Reg. No. C/61/B214.1; Area C, Sq. DD100, Locus 414, Bucket 214

Rim diam.: 18.5; Max h.: 7

Outcurved thickened rim, high slightly flared neck, two handles. Red ware and core (2.5YR6/6), very pale brown wash (10YR8/2), a few small white and a few large red grits, hard fired.

Date range: late 1st/early 2nd – early 4th cent. CE

7 Amphora fragment

Reg. No. C/61/B292; Area C, Bucket 292

Rim diam.: 13; Max h.: 7

Outcurved thickened rim. Red ware and core (2.5YR6/6), very pale brown wash (10YR7/4), a few minute white and red grits, hard fired.

Date range: late 1st/early 2nd – early 4th cent. CE

8 Amphora fragment

Reg. No. C/61/B176.1; Area C, Bucket 176.1

Handle fragment. Light reddish-brown ware (5YR6/4) and red core (2.5YR6/6), pale brown wash (10YR6/3), a few small white grits, hard fired.

Date range: late 1st/early 2nd – early 4th cent. CE

9 Amphora

Reg. No. A/73/B582; Area A, Locus 752, Bucket 582

Handle fragment. Light reddish-brown ware (5YR6/4) and red core (2.5YR6/6), pale brown wash (10YR6/3), a few small white grits, hard fired.

Date range: late 1st/early 2nd – early 4th cents. CE

10 Amphora fragment

Reg. No. C/61/B295; Area C, Bucket 295

D base: 3.8; Max h.: 10

Base fragment. Very pale brown ware (10YR7/4) and pink core (5YR7/4), many minute white grits, many minute and small red grits, hard fired.

Date range: late 1st/early 2nd – early 4th cents. CE

11 Amphora fragment

Reg. No. C/61/B214; Area C, Bucket 214.2

Base fragment. Light reddish-brown core (5YR6/4), pinkish-white wash (5YR8/2), a few small white grits, medium fired.

Date range: late 1st/early 2nd – early 4th cents. CE

12 Amphora fragment

Reg. No. A/72/B636; Area A, Locus 752, Bucket 636

Rim diam.: 6.5

Folded rim, high and narrow neck, two handles attached from below rim to shoulder. Very pale brown ware and core (10YR7/3), many medium white and black grits, hard fired.

Date range: 3rd–4th cent. CE

13 Amphora fragment

Reg. No. 79/A/70/277; Area A, Bucket 277

High max: 15.5

- High and narrow neck and shoulder. Very pale brown ware and core (10YR7/4), a few medium red grits, hard and gritty firing.
Date range: 3rd–4th cent. CE
- 14 Amphora fragment
Reg. No. A/72/B606; Area A, Locus 752, Bucket 606
Neck and handles fragment. Light reddish-brown core (5YR6/6), many small white and volcanic grits, medium fired.
Date range: 3rd–4th cent. CE
- 15 Amphora fragment
Reg. No. C/61/B451; Area C, Bucket 451
Rim diam.: 11; Max h.: 7
Thickened rim, wide neck, two handles attached below rim. Pink ware (7.5YR7/4) and yellowish-red core (5YR5/6), a few medium white and gray grits, a few thin silver mica grits, hard and gritty firing.
Date range: late 1st–2nd cent. CE
- 16 Amphora fragment
Reg. No. C/61/B201; Area C, Bucket 201
Rim diam.: 12.5; Max h.: 7
Thick rim, two handles attached below rim. Reddish-yellow ware and core (7.5YR7/6), many small white, black and gray grits, a few small gold mica grits, medium fired.
Date range: late 1st–2nd cent. CE
- 17 Amphora fragment
Reg. No. C/61/B287.3; Area C, Sq. DD102, Bucket 287
Handle fragment. Light reddish-brown ware and core (5YR6/4), pinkish-white wash (5YR8/2), moderate medium gold mica, medium fired.
Date range: late 1st–2nd cent. CE
- 18 Amphora fragment
Reg. No. C/61/B252; Area C, Bucket 252
Handle fragment. Light reddish-brown ware and core (5YR6/4), pinkish-white wash (5YR8/2), a few small white grits and many thin silver mica grits, medium fired.
Date range: late 1st–2nd cent. CE
- 19 Amphora fragment
Reg. No. C/61/B174.2; Area C, Bucket 174
Handle fragment. Light reddish-brown core (5YR6/4), a few small white grits, medium fired.
Date range: late 1st–2nd cent. CE
- 20 Amphora fragment
Reg. No. C/61/B214.2; Area C, Bucket 214.1
Handle fragment. Light reddish-brown core (5YR6/4), pinkish-white wash (5YR8/2), many small white and gray grits, medium fired.
Date range: late 1st–2nd cents. CE
- 21 Amphora fragment
Reg. No. 79/C/61/440; Area C, Sq. DD101, Locus 428, Bucket 29
Rim diam.: 16; Rim diam.: 10; Max h.: 41.5
Slightly concave shelf rim, short neck, two parallel grooves around shoulder, rounded body, flat base, two vertical handles from below the rim to the shoulder. Brown core (7.5YR5/4), pale brown wash (10YR6/3), a few small crushed shells, a few small volcanic grits, hard and granular firing.
Date range: 1st cent. BCE – mid-1st cent. CE
- 22 Amphora fragment
Reg. No. C/61/B285; Area C, Bucket 285
High max: 9
Slightly concave shelf rim, short neck, two vertical handles from below the rim. Brown core (7.5YR5/4), pale brown wash (10YR6/3), a few small crushed shells, a few small volcanic grits, hard and granular firing.
Date range: 1st BCE – mid-1st cent. CE

Aegean (Nos. 23–33)

A single fragment of rim and a fragment of ‘horn’ handle were found, both made of pink fabric characteristic of Rhodian amphorae (nos. 23–24). Similar to 1st–2nd century CE Rhodian amphorae known as *Ostia LXV* (Panella 1973:555–559, fig. 37 on p. 631), *ER Amphora 3* (Riley 1979:147–149, fig. 73:107, 113–115), and as *Knossos Type 25* dated to the early 2nd century CE (Hayes 1983:151, fig. 24:A66). Such amphorae are known all over the Mediterranean basin and beyond (Bjelajac 1996:38–39, fig. XI; Zeest 1960:110–111, Pl. XXIX:67), but were rarely found at southern Levantine sites such as the example in from Caesarea Maritima (Oleson et al. 1994:12, fig. 2:A2; Gendelman forthc. a).

One almost complete amphora and a base fragment from another vessel are related to the product of Cnidus (nos. 25–26). The *knidia* amphorae, well known from the Hellenistic period, continued to be produced with some minor morphological changes until the 4th cent. CE. The Jaffa specimens, characterized by a slender body, high neck with folded rim and arched handles, are rather close to the mid-1st century BCE variation from the Bodrum Museum (Alpözen et al 1995: v–3–8, inventory 1.25.91) rather than the wider belly variation of the 1st to the 3rd centuries CE from Athens, the Alanya Museum, and Beirut (Grace 1961:figs. 64, 66; Sibella 2002:8, fig. 8, ca. 250 CE; Reynolds 2003:128, fig. 29).

A complete amphora was found with additional rim and handle fragments belonging to a well known type produced in Crete and exported all over the Mediterranean basin (nos. 27–29) (Marangou-Lerat 1995:82–84).⁸⁸ The amphora is tall with barreled body, button shaped base, cylindrical relatively short neck and thick folded rim and a pair of curved handles, oval in section, connected to the shoulder and to the neck below the rim. It is related to the *Knossos I* (Hayes 1983:140–143) and *Type AC3* which generally dates from the beginning of the 1st until the beginning of the 3rd century CE (Marangou-Lerat 1995:82–84, figs. 67, 68). A similar shaped variation is known from the Augustan to the Hadrianic period deposits at Knossos (Sackett 1992:178, 190, 239, fig. 7:2, pls. 135:102, 103, 104, 181:71a) and from a shipwreck of the last quarter of the 1st century CE (McCann and Oleson 2004:136, figs. 7:14, 7:15).

Three fragments of amphorae with bowl-shaped mouth each made of diverse fabric were found. These belong to the squat amphora with high sloping neck, with grooved strip handles from the neck below the mouth to the shoulder (nos. 30–32). This is the type of amphora that seems to have been produced in vast areas of the Aegean⁸⁹ and the Pontus from the 1st to the 3rd century CE and known as *Dressel 24*; *Zeest 90* (Zeest 1960:117, Tab. XXXVII:90a–d), *MR Amphora 18* (Riley 1979:205–206, fig. 87:288–289), *Class 57* (Peacock and Williams 1986:213, fig. 130), *Hayes’ Type V* (Hayes 1991:92, Fig. 39:25), and *Bjelajac Type XVI Variant I*, dated to the 2nd century and the 1st half of the 3rd century CE (Bjelajac 1996:54–55, fig. XVII:79).

An additional fragment was found also related to bowl-shaped mouth amphorae, made of coarse brown fabric and seems to be similar to the amphora *Agora M235* dated to the 4th cent. CE (no. 33) (Robinson 1959:106, pl. P16074).

23 Amphora fragment

Reg. No. C/61/B287.5; Area C, Sq. DD102, Bucket 287

Rim diam.: 12.5; Max h.: 6.5

Knobbed rim, straight neck. Reddish-yellow ware and core (7.5YR7/6), a few minute white grits, hard fired.

Date range: 1st–2nd cent. CE

24 Amphora fragment

Reg. No. 2038/C/IV/61; Area C, Bucket 275

Fragment of handle. Reddish-yellow ware and core (7.5YR7/6), self slip, a few small white grits, hard fired.

Date range: 1st–2nd cent. CE

25 Amphora fragment

Reg. No. 79/A/73/106; Area A, Bucket 591

⁸⁸ First published without identification by Kaplan (1964:8, fig.1.3, pl.1:2).

⁸⁹ For evidence for production of this type in Chios, see Tsaravopoulos 1986, figs. 36–37.

Rim diam.: 6; Max h.: 68

Plain rim with a groove below it, cylindrical neck, rounded shoulder, conical body, pointed base, two vertical loop handles from neck to shoulder. Reddish-yellow ware and core (2.5YR6/6), small moderate white grits, little small gold mica grits, hard fired.

Date range: mid-1st BCE to 1st cent. CE

26 Amphora fragment

Reg. No. A/72/B456.1; Area A, Locus 750 and 752, Bucket 456

D base: 4.2; Max h.: 8

Base. Pink ware (7.5YR7/4) and reddish-yellow core (5YR6/6), self slip, a few small white grits, hard fired.

Date range: mid-1st cent. BCE – 1st cent. CE

27 Amphora fragment

Reg. No. C/61/B717; Area C, Bucket 717

Rim diam.: 15; Max h.: 4

Thick and flared rim. Light reddish-brown ware and core (5YR6/4), self slip, a few minute white grits, many small silver mica grits, hard fired.

Date range: late 1st BCE – end of 1st cent. CE

28 Amphora fragment

Reg. No. 79/C/61/454; Area C, Sq. DD102, Locus 432, Bucket 621

Rim diam.: 13; Rim diam: 4; Max h.: 58.5

Thickened rim, medium-size neck, rounded body, small omphalos base, two vertical handles attached from neck to shoulder. Reddish-brown core (5YR5/4), self slip, a few medium white grits, hard fired.

Date range: late 1st BCE – end of 1st cent. CE

29 Amphora fragment

Reg. No. C/61/B288; Area C, Bucket 288

Handle fragment. Reddish-brown core (5YR5/4), self slip, a few medium white grits, hard fired.

Date range: late 1st BCE – end of 1st cent. CE

30 Amphora fragment

Reg. No. 79/C/65/595; Area C, Sq. DD103 Locus 456, Buckets 1030 and 1032

Rim diam.: 14; Max h.: 26.5

Flattened thickened rim, long neck, gradually widening downwards, two handles from below rim. Weak red ware and core (2.5YR5/3), white wash, a few small white grits, hard fired.

Date range: 1st–3rd cents. CE

31 Amphora fragment

Reg. No. C/61/B175; Area C, Bucket 175

Rim diam.: 18; Max h.: 6

Flat thickened rim. Very pale brown ware (10YR7/4) and reddish-yellow core (5YR6/6), a few minute white grits, hard fired.

Date range: 1st–3rd cents. CE

32 Amphora fragment

Reg. No. C/61/B191; Area C, Bucket 191

Rim diam.: 18; Max h.: 6.5

Thick and flared rim. Pink core (5YR7/4), very pale brown wash (10YR8/4), a few minute red grits, a few thin silver mica grits, hard fired.

Date range: 1st–3rd cents. CE

33 Amphora fragment

Reg. No. 79/C/65/596; Area C, Sq. DD103, Locus 458, Bucket 1039

Rim diam.: 15; Max h.: 19.5

Wide thickened rim, short neck gradually widening downwards, two wide handles from below rim to shoulder. Yellowish-red ware (5YR5/6) and core (5YR4/6), a few small white and red grits, hard rough firing.

Date range: 3rd–4th cents. CE

10.2. Western Mediterranean Amphorae

Italy (Nos. 34–48)

Two upper fragments were found, and an additional body fragment made of hard pinkish fabric. They belong to the well known type of amphorae with bag-shaped body, solid pointed spike, long cylindrical neck with thick rod handles connecting the neck to the conical and almost unnoticed shoulder (nos. 34–35). They are similar to Istrian product *Dressel 6A* amphorae (Sciallano & Sibella 1994:36) dated from the late 1st century BCE to the end of the 1st century CE (*Riley's ER Amphora 5*: Riley 1979:151–157; *Peacock & Williams' Class b/Lamboglia 2/Dressel 6*: Peacock & Williams 1986:98–101, fig.34B). These vessels are common finds in major cities of the Eastern Mediterranean.⁹⁰ In Israel, such amphorae are well known from Caesarea (Blakely 1987:243–244, figs. 15:16, 19, 16:22, 17:35), Jerusalem (Tushingham 1985:55, figs. 21:43, 23:36, 27:23; Ariel 1990:78, pl. 2:S467), Herodium (*Bar-Nathan's Type 2*: Bar-Nathan 1981:66, pls. 1:12, 4:4–5, 10:2), Masada (*Bar-Nathan's Type M-AM10*: Bar-Nathan 2006:333–335, pls. 68, 69:39–42, fig. 105), and Jericho (Bar-Nathan 2002:135–136, pl. 21:354). The shoulder fragment of this type of amphora bears the Latin inscription T.H.VB. Similar stamped vessels manifested by the father of *T. Helvius Basilea*, a legate under Claudius and Nero, were found in Corinth (Callender 1965:285; Adamsheck 1979:108–109, pls. 26:RC1, 28:RC1), Paphos (Hayes 1991:58, 79, fig. 39:1, 3, pl. XXII:7, 12) and Caesarea (Gendelman forthc. a).

A shoulder fragment was found from a distinctive type of conical amphorae with solid spike, rudimentary shoulder, and wide cylindrical neck (almost as wide as the body), thickened double rolled rim, and oval-shaped handles connecting neck to shoulder (no. 36). This form, also known as “fruit-amphorae,” is similar to *Callender's Form 4* (Callender 1965:13–14), *Ostia LIV* (Panella 1973:496–500, fig. 3 p. 625), *Peacock & Williams' Class 7* (Peacock and Williams 1986:96–97, fig. 32), and *Dressel 21–22* (Sciallano and Sibella 1994:37). Such amphorae, dated from the Augustan period until the end of the 1st century CE, are rarely found in Israel⁹¹ and findings were found mainly in big harbour cities such as Caesarea (Gendelman forthc. a), in Jerusalem (Tushingham 1985: fig. 23:37) and from the palaces of Herod in Jericho, Cypros and Masada (Bar-Nathan 2002:133–134, pl. 21:349–353, Ill. 97; Bar-Nathan 2006:331–333, pl. 67:33–35, figs. 103–104).

The most common among Roman amphorae findings from Kaplan's excavations in Jaffa are those that belong to the distinct double-rod handles vessels (nos. 37–45). Such amphorae, with distinct barrel-shaped body, solid cylindrical spike, narrow cylindrical neck and simple beaded rim are known as *Dressel 2–4* (similar to *Callender's Form 2*: Callender 1965:9–12, pl. Id; *Ostia LI*: Panella 1973:497–500; *Riley's Early Roman Amphora 4*: Riley 1979:149–151, fig. 74:118–122, pl. XXXIV:118 and *Peacock & Williams' Class 10*: Peacock and Williams 1986:105–106, fig. 39), and are dated from the last quarter of the 1st century BCE until the beginning of the 2nd century CE (Riley 1979:150). The shape, developed in Italy in the late 1st century BCE (Peacock and Williams 1986:105–106), was imitated in other Western and Eastern Mediterranean regions⁹² but the fabric of the Jaffa examples are visually close to these of Italian origin. Such amphorae were commonly found in Early Roman Caesarea (Oleson *et al.* 1994:12–13, figs. 2:6, 3:8; Gendelman forthc. a), and also frequently in Jerusalem (Avigad 1983:202–203, Ill. 69, 136; Tushingham 1985:fig. 24:1), Herodium (Bar-Nathan 1981:66, Pls. 1:12, 4:1, 2, 10:1, 3), Masada (as *Bar-Nathan's Type M-AM7A-E*: Bar-Nathan 2006:323–330, pls. 29:62–65, 66:27–29, figs. 95–101), Jericho (Bar-Nathan 2002:133–134, Pl. 21:342–348, Ill. 97), and Machaerus/Mechvar (Loffreda 1996:114, fig. 51:9, 10, 12, 17, 20–23).

Three upper fragments of amphorae were found with a narrow slightly flaring neck terminated by collar-like rim and thick oval handles attached to upper neck (nos. 46–48). This seems to be a late derivation of *Dressel 2–4* known as *Mid-Imperial "Campanian" Amphora* (Arthur and Williams 1992: figs.1, 2) and *Peña's Class 2* (Peña 1999:71–72, fig. 7.1). Such amphorae, typologically, were produced in several Italian

⁹⁰ See Athens (Robinson 1959:86, pl. 19:M14), Corinth/Kenchreai (Adamsheck 1979:108–109, pls. 26:1a, 28:1a), Paphos (Hayes 1991:88, 186, figs. 39:1–3, 64:74–77, pl.22:7, 12), Tyre (Bikai *et al.* 1996:27, fig. 93:14), and Alexandria (Empereur 1998:394, fig. 8).

⁹¹ This type was distributed mainly throughout the western parts of the Roman Empire (Peacock and Williams 1986:96).

⁹² In Southern France (Desbat 2003:45, fig. 1:2a,b), Spain (Sciallano and Sibella 1994:49), Cyprus (Hayes 1991:90–91, Pl. XXIV: 1, 5), Egypt (Empereur and Picon 1998:77, fig. 5), and the Black Sea (Vnukov 2004:407–411, figs. 1–3).

regions such as Campania and Calabria, from the 2nd to the late 3rd or early 4th cent. CE (Arthur and Williams 1992:258). So far in Israel these amphorae were unearthed in Caesarea (Gendelman forthc. a) and Shuni (Gendelman forthc. b).

34 Amphora fragment

Reg. No. C/61/B614; Area C, Bucket 614

Rim diam.: 14; Max h.: 28

Thick folded collared rim and high and narrow neck, narrow shoulder, two handles attached from below rim to shoulders. Very pale brown ware (10YR8/3) and core (10YR8/2), a few small red grits, hard fired.

Date range: late 1st cent. BCE – 1st cent. CE

35 Amphora fragment

Reg. No. C/61/B652; Area C, Sq. CC101, Locus 433, Bucket 652

Thick folded collared rim. Very pale brown ware (10YR8/3) and pink core (7.5YR8/4), hard fired. The shoulder fragment bears the Latin inscription T.H.VB

Date range: late 1st cent. BCE – 1st cent. CE

36 Amphora fragment

Reg. No. C/61/B618.2; Area C, Sq. DD102–CC102, Bucket 618

Handles designed with grooved and thumb impress in bottom, where they are attached to the shoulder. Reddish-yellow ware (5YR7/6), a few small white and red grits, a few thin silver mica grits, hard fired.

Date range: Augustan period to end of 1st cent. CE

37 Amphora fragment

Reg. No. A/70/B255.2; Area A, Sq. L3, Bucket 255

Rim diam.: 11; Max h.: 7.5

Outcurved thickened rim, short neck, rounded shoulder, two vertical double-barreled handles attached from below the rim. Reddish-yellow ware (7.5YR7/6) and strong brown core (7.5YR5/8), many minute white and black grits, hard fired.

Date range: Last quarter of 1st cent. BCE – early 2nd cent. CE

38 Amphora fragment

Reg. No. C/61/B300; Area C, Bucket 300

Flat thickened rim, short neck, two vertical double-barreled handles attached from below the rim. Red core (2.5YR6/6), a few minute white grits, hard fired.

Date range: Last quarter of 1st cent. BCE – early 2nd cent. CE

39 Amphora fragment

Reg. No. C/61/B435; Area C, Bucket 435

Thickened and flared rim. Pink ware (5YR7/4) and reddish-yellow core (5YR6/8), many minute white and black grits, hard fired.

Date range: Last quarter of 1st cent. BCE – early 2nd cent. CE

40 Amphora fragment

Reg. No. C/61/B318; Area C, Bucket 318

High max: 7.5

Outcurved thickened rim, short neck, two vertical double-barreled handles attached from below the rim. Pink ware (7.5YR8/3), self slip, a few minute white grits and a few minute gold mica grits, hard fired.

Date range: Last quarter of 1st cent. BCE – early 2nd cent. CE

41 Amphora fragment

Reg. No. C/61/B522; Area C, Bucket 522

Outcurved thickened rim, short neck, two vertical double-barreled handles attached from below the rim. Red ware (2.5YR5/8) and pink wash (7.5YR8/4), many small white grits and gold mica, hard rather rough fired.

Date range: Last quarter of 1st cent. BCE – early 2nd cent. CE

42 Amphora fragment

Reg. No. C/61/B197; Area C, Bucket 197

Rim diam.: 15; Max h.: 7.5

Outcurved thickened rim, short biconical neck, two vertical double-barreled handles attached from below the rim. Light brown ware (7.5YR6/4) and brown core (7.5YR5/3), a few small white grits, hard fired.

Date range: Last quarter of 1st cent. BCE – early 2nd cent. CE

43 Amphora fragment

Reg. No. 79/A/70/122; Area A, Sq. K3, Bucket 103

Rim diam.: 12.5; Max h.: 10

Outcurved thickened rim, short neck, rounded shoulder, two vertical double-barreled handles attached from below the rim. Very pale brown ware (10YR7/3), yellowish slip, many minute white and black grits, hard fired.

Date range: Last quarter of 1st cent. BCE – early 2nd cent. CE

44 Amphora fragment

Reg. No. 79/G/64/073; Area G, Sq. 27, Bucket 31

Rim diam.: 10.5; Max h.: 7.5

Everted thickened rim, short neck, rounded shoulder, two vertical double-barreled handles attached from below the rim. Pink ware (5Y8/5), hard fired.

Date range: Last quarter of 1st cent. BCE – early 2nd cent. CE

45 Amphora fragment

Reg. No. C/61/B174.2; Area C, Bucket 174

Thickened rim, wide neck. Pink ware (7.5YR7/4), yellowish-red core (5YR5/6), a few minute white and black grits, hard fired.

Date range: Last quarter of 1st cent. BCE – early 2nd cent. CE

46 Amphora fragment

Reg. No. A/72/B149; Area A, Locus 752, Bucket 149

Thickened rim, high neck, two handles attached from below rim. Yellowish-red ware (5YR5/6) and red core (2.5YR5/6), a few small red grits, many minute silver mica, medium fired.

Date range: 2nd – late 3rd/early 4th cents. CE

47 Amphora fragment

Reg. No. C/61/B195; Area C, Bucket 195

Yellowish-red ware (5YR5/6) and red core (2.5YR5/6), a few small white and red grits, medium fired.

Date range: 2nd – late 3rd/early 4th cents. CE

48 Amphora fragment

Reg. No. 79/A/70/217; Area A, Sq. L4, Bucket 364

Rim diam.: 14.5

Flaring thickened rim, cylindrical neck, beginning of vertical loop handle from neck. Reddish-yellow ware (7.5YR7/6), many minute black grits, hard fired.

Date range: 2nd – late 3rd/early 4th cent. CE

Sicily (Nos. 49–50)

Two upper fragments were found belonging to the distinct type of small-footed amphorae, with squat body, conical shoulder, narrow high neck and thickened in-turned rim (nos. 49–50). It is similar to *Agora M254* (Robinson 1959:108, pl. 28:M254), *Mid-Roman Amphora 1* (Riley 1979:177–179, fig. 80:215–216) and *Peña Class 4* (Peña 1999:74, fig. 9.7–8). The form is dated from the 2nd half of the 1st until the late 5th–early 6th centuries CE according to the Palatine excavation (Peña 1999:74) and from the 2nd to the 4th centuries CE according to findings at other sites (Riley 1979:177–179; Peacock and Williams 1986:175–176, fig. 93; Keay 1989:50, fig. 14:241). Tunisia has been suggested as the origin of this vessel (Riley 1979:177–179), but recently several production sites of these amphorae came to light in Naxos in eastern Sicily (Peña 1999:74). In Israel, this form is rarely reported from Caesarea (Magness 1992:139, fig. 59:12; Gendelman forthc. a), Shuni (Gendelman forthc. b), and Shechem (Sarig 2009, pl. 55:9).⁹³

⁹³ At Shechem this was mistakenly identified as a flask.

49 Amphora fragment

Reg. No. A/72/B623.2; Area A, Locus 752, Bucket 623

Rim diam.: 8.5

Thickened inturned rim, narrow and high neck, two handles attached from below rim. Light brown ware (7.5YR6/4) and weak red core (2.5YR5/4), many small white grits, medium fired.

Date range: 2nd–4th cents. CE

50 Amphora fragment

Reg. No. A/73/B575; Area A, Bucket 575

Rim diam.: 7.4; Max h.: 14.5

Thickened inturned rim, narrow and high neck, two handles attached from below rim. Light reddish-brown ware (5YR6/4) and red core (5YR6/4), whitish wash, many minute white grits, a few thin silver mica grits, hard fired.

Date range: 2nd–4th cents. CE

North African (Nos. 51–65)

A considerably large number of fragments are of well-known large-sized cylindrical amphorae with pointed base, short neck and thick rim grooved on outer face (nos. 51–58). They are similar to *Tripolitanian I/Ostia LXIV* (Panella 1973:560–562, figs. 22–23, 252, 389) *Riley ER Amphora 11a* (= *Dressel 6*, cf. Riley 1979:164–167, figs. 77:155–161, 78:162), and *Bonifay Type 19/ Tripolitanian I* dated from the Augustan to the middle of 2nd century CE (Bonifay 2004:105, fig. 55:1). This type, which is the second most common amphorae from Kaplan's excavations at Jaffa, is a relatively common find in Israel at sites such as Caesarea (Gendelman forthc. a) Shuni (Gendelman forthc. b), Ramat Hanadiv (Silberstein 2000:444, pl. X:11), and Jerusalem (Ariel 2003:227, pls. 6.8:9–10, 6.9:46, 6.10:22).

Among vessels originating from *Africa Proconsularis* (modern Tunisia), the most common finds in the Jaffa excavations are large-sized cylindrical amphorae with solid spike, rounded shoulder, short conical neck, and a pair of oval loop handles known as *Africana II* and represented by three variants. A complete vessel and an additional base fragment are of the large-sized cylindrical amphorae characterized by a thick flaring rim (nos. 59–60). It is similar to *Africana IIA* (Panella 1973:580–591, fig. 27 on p. 629), *Keay Type IV/African IIA "senza grandino" Variant 1* from the end of the second to probably the 4th or 5th century CE (Keay 1984:110–114, fig. 19:5), *Bonifay Type 22 Variant A2* dated from the end of the 2nd to the beginning of the 3rd century (Bonifay 2004:111, fig. 57:4–6). Two rim fragments belonging to the other variant of the same type (see above) are distinguished by the undercut on the rim face (nos. 61–62). They are similar to the *Keay Type V/African IIA "con grandino"* from the end of the 2nd to probably the mid-3rd century CE (Keay 1984:114–115, figs. 42:1–3, 43), *Mid-Roman Amphora 17b* of the late 2nd to 4th centuries CE (Riley 1979:204–205, fig. 87:283–285), and *Bonifay Type 22/Africana IIA Variant A2*, dated from the end of the 2nd to the beginning of the 3rd century CE (Bonifay 2004:111, fig. 57:4–6). The rim and base fragments belong to a variant characterized by a rolled heavy rim (nos. 63–64). It is related to the *Keay Type VI/Africana IIC* (Keay 1984:118–121, fig. 44:6–7, 45) and the *Bonifay Type 25/Africana IIC Variant CI* dating from the middle of the 3rd to the beginning of the 4th century CE (Bonifay 2004:114–115, fig. 60). A single rim fragment was found belonging to the later series of cylindrical amphorae characterized by a thinner body, narrower neck and flaring rim with protruded outer face (no. 65). This seems to be related to the *Keay Type XXVG* dated from the early 4th to the mid-5th century (Keay 1984:184–195, figs. 23:6, 25:2; Freed 1995:fig. 1:3).

51 Amphora fragment

Reg. No. C/61/B164; Area C, Bucket 164

Rim diam.: 17; Max h.: 9

Collared rim grooved on outer face, two handles attached below rim. Dusky red internal ware (2.5YR4/3) and dark reddish-gray core (5YR4/2), external very pale brown wash (10YR7/4), many medium white grits, hard fired.

Date range: Augustan to mid-2nd cent. CE

- 52 Amphora fragment
Reg. No. C/61/B558; Area C, Sq. CC100, Bucket 558
Rim diam.: 18; Max h.: 5
Collared rim. Dark reddish-gray ware (2.5YR4/1) and dark red core (2.5YR4/6), many medium white and black grits, hard fired.
Date range: Augustan to mid-2nd cent. CE
- 53 Amphora fragment
Reg. No. C/61/B570; Area C, Sq. CC100, Bucket 570
Rim diam.: 17; Max h.: 7
Collared Rim. Pink internal ware (7.5YR7/3) and gray core (7.5YR5/1), external very pale brown wash (10YR8/3), many small white grits, hard fired.
Date range: Augustan to mid-2nd cent. CE
- 54 Amphora fragment
Reg. No. C/61/B643; Area C, Bucket 643
Rim diam.: 17; Max h.: 9
Red (2.5YR5/6) and reddish-brown (2.5YR3/1) core, dark reddish-gray wash on rim (2.5YR4/1), many small white grits, hard fired.
Date range: Augustan to mid-2nd cent. CE
- 55 Amphora fragment
Reg. No. 79/J/70/096; Area J, Buckets 30, 18, and 32
Rim diam.: 15.8; Max h.: 12
Thick collared rim, flared neck. Reddish-brown ware (5YR5/3) and red core (2.5YR5/6), external and on inner rim very pale brown wash (10YR8/4), many minute white grits and a few large black grits, hard firing.
Date range: Augustan to mid-2nd cent. CE
- 56 Amphora fragment
Reg. No. C/61/B234; Area C, Bucket 234
Collared rim. Dark reddish-gray ware (2.5YR4/1) and red core (2.5YR5/6), very pale brown wash (10YR8/4), many minute white grits, hard fired.
Date range: Augustan to mid-2nd cent. CE
- 57 Amphora fragment
Reg. No. C/61/B437; Area C, Bucket 437
Rim diam.: 17
Collared rim. Dark reddish-gray ware (2.5YR4/1) and red core (2.5YR5/6), very pale brown wash (10YR8/4), many minute white grits, hard fired.
Date range: Augustan to mid-2nd cent. CE
- 58 Amphora fragment
Reg. No. C/61/B618; Area C, Locus 433, Bucket 618
Rim diam.: 17
Collared rim. Dark reddish-gray ware (2.5YR4/1) and red core (2.5YR5/6), very pale brown wash (10YR8/4), many minute white grits, hard fired.
Date range: Augustan to mid-2nd cent. CE
- 59 Reg. No. 79/T/62/018; Area T, Bucket 12
Rim diam.: 12
Thickened collar rim, low neck narrowing toward broad shoulder, globular body, solid base. Two loop handles attached from mid neck to shoulder. Knife marks on body exterior. Gray ware and red core (10R5/6), pinkish-white wash, hard fired.
Date range: end of 2nd to early 3rd cents. CE
- 60 Amphora fragment
Reg. No. A/72.1; Area A, Bucket 72.1
High max: 13.5
Solid high base. Red ware (2.5YR6/8) and pink wash (7.5YR8/4), a few small white grits, hard fired.
Date range: end of 2nd to early 3rd cents. CE

61 Amphora fragment

Reg. No. A/72/B559; Area A, Locus 752, Bucket 559

Rim diam.: 12; Max h.: 6.5

Thickened slightly out-curved rim. External reddish-gray ware (5YR5/2) and internal weak red ware (2.5YR6/4), dark red core (2.5YR4/8), a few minute white grits, a few minute silver mica grits, hard fired.

Date range: end of 2nd – early 3rd cents. CE

62 Amphora fragment

Reg. No. C/61/B192.2; 193.1; Area C, Sq. DD100, Locus 414, Buckets 192 and 193

Rim diam.: 11; Max h.: 6

Thickened and outcurved rim. red core (2.5YR5/6), white wash, moderate small white grits, hard fired.

Date range: end of 2nd – early 3rd cents. CE

63 Amphora fragment

Reg. No. A/72/B449.1; Area A, Locus 752, Bucket 449

Rim diam.: 13; Max h.: 7

Thick outfolded rim. Weak red ware (2.5YR5/4) and dark red core (2.5YR4/8), a few small and medium white grits, hard fired.

Date range: mid-3rd – early 4th cents. CE

64 Amphora fragment

Reg. No. A/72.2; Area A, Bucket 72.2

High max: 18.5

Solid high and pointed base. Red core (2.5YR5/6) and dark reddish-gray wash (2.5YR5/1), many small white grits, hard fired.

Date range: mid-3rd – early 4th cents. CE

65 Amphora fragment

Reg. No. C/61/B87; Area C, Bucket 87

Thick everted rim. Weak red on internal face (2.5YR6/4) and red core (2.5YR5/6), very pale brown wash (10YR8/2), a few small white grits, a few thin silver mica grits, hard fired.

Date range: early 4th – mid-5th cents. CE

Mauretania (Nos. 66–67)

Rim and base fragment are of pyriform amphorae on hollow foot, with short neck, folded rim and flattened curved handles (nos. 66–67). They are dated from the late 2nd to the 4th centuries CE known as *Mauretian Dressel 30/Ostia V/ Keay Type IB* (Keay 1984:95–99, figs. 35:1–7, 36:1–5) and *Mid-Roman Amphora 12* (Riley 1979:196–197, fig. 85:251). Their provenance, as indicated by stamps, seems to be Ancient Mauretania, modern Algeria (Peña 1999:96). In Israel, such amphorae are known from Caesarea Maritima (Bar-Nathan and Adato 1986:161–162, fig. 1:6, 10–12, Ills. 149–151; Oleson et al. 1994:13,108, figs. 3:A9, 33:A58; Gendelman forthc. a) and from Shuni (Gendelman forthc. b).

66 Amphora fragment

Reg. No. 79/G/64/010; Area G, Sq. 29, Bucket 72

Rim diam.: 8.8; Max h.: 15

Collared rim, high cylindrical neck widening toward shoulders, two handles attached from center of neck slightly rising up. Reddish-yellow ware (5YR6/6) and yellowish-red core (5YR5/6), many small black grits, a few thin silver mica, medium fired.

Date range: late 2nd – early 4th cents. CE

67 Amphora fragment

Reg. No. C/65/B964; Area C, Locus 445, Bucket 964

D base: 7.2; Max h.: 7

Ompholos base. Pale brown ware (10YR6/3) and pale brown/red core (10YR6/3; 2.5YR5/6), many small white and minute black grits, hard fired.

Date range: late 2nd – early 4th cents. CE

Iberian Peninsula (nos. 68–77)

A rim fragment was found from an amphora characterized by egg-shaped body, long hollow spike base, narrow shoulder, long wide cylindrical neck and thick everted rim with two wide flattened handles (no. 68). They belong to the well-known type categorized as *Dressel 7* (Sciallano and Sibella 1994:53), *Beltrán's Form Ib* (Beltrán 1978:169, pl. LXVIII:886), *Ostia Form LII* (Panella 1973:506–509, fig. 8 on p.626 and figs. 448, 635), *Riley's Early Roman Amphora 7* (Riley 1979:159–160, figs. 75:132–133, 76:137). Those amphorae were produced in the Roman province of Baetica from the late 1st century BCE to the 1st century CE (Martin-Kilcher 2003:73, 78, figs. 4, 7, 8), and were widely distributed all over the Roman Empire include Judea (for such amphorae from Caesarea, Masada, and Jericho, see Gendelman forthc. a, Bar-Nathan 2006:337, pl. 70:47, fig. 109, and Bar-Nathan 2002:136–137, pl. 22:363, 365).

Two rims and a base fragment are of a later variation of Baetican amphorae, characterized by a wide mouth, hooked rim and conical hollowed base (nos. 69–71). They are similar to the late 1st to 2nd century CE *Dressel 38* (Sciallano et Sibella 1994:59), *Beltrán IIA* (Beltrán 1978:169–170, pl. LXVIII:861), and *Dressel 38–39/Ostia LXIII/Pompeii VII* (Panella 1973:512–515, 622, figs. 656, 237, pl. on p. 626 nos. 11, 12). In Israel, such amphorae are known from Caesarea Maritima (Gendelman forthc. a) and Shuni (Gendelman forthc. b).

Two rim fragments were found of globular amphorae with a short neck and massive loop handles, solid rim with inner lid-setting and an outturned exterior face (nos. 72–73). They are similar to *Keay Type XIII/A/Dressel 23* dated from the 3rd to the 4th or early 5th century CE (Keay 1984:140–146, figs. 54, 55:1–2) and with the 3rd to 4th centuries CE *Peacock and Williams' Class 26* (Peacock and Williams 1986:141–142, figs. 66:43–49, 69).

A single fragment was found of an amphora with a low neck terminating in an out-curved rim and lentoid handles connected to the rim (no. 74). It is similar to the 2nd to the 4th or early 5th century *Ostia IV* (Panella 1973, figs. 255, 256) and *Keay Type XXIII/Almagro 51C* (Keay 1984:172–178, figs. 22:6, 69:1–2, 70:1–2, 71:3), which originated in ancient Lusitania (Portugal) (Sciallano et Sibella 1994:70).

Three fragments of amphorae were found with a short cylindrical neck, rolled rim with inner gutter for lid setting and oval heavy handles connected to the rim (nos. 75–77). They are similar to the 3rd century CE *Hayes's Type 13* (Hayes 1983:147, fig. 20a:37) and seems to be related to Lusitanian (Portugal) *Almagro 50* (from the end of the 3rd to the beginning of the 4th cent. CE) or *Almagro 51C* (Sciallano et Sibella 1994:68, 70). Comparisons are reported from Benghazi/Berenice, from 200–230 contexts, marked as “a very late Dressel 20 shape” (Riley 1979:204–205, fig. 88:298–9) and from a Caesarea Maritima deposit dated from the end of the 2nd to the 3rd century CE (Bar-Nathan and Adato 1986:162, fig. 1:17, Ill.153).

68 Amphora fragment

Reg. No. C/61/B450; Area C, Bucket 450

Rim diam.: 12; Max h.: 6

Flared rim with triangular section. Red ware (2.5YR6/6) and core (2.5YR6/8), pinkish-white wash, a few medium white and gray grits, many small gold mica grits, hard fired.

Date range: late 1st cent. BCE – 1st cent. CE

69 Amphora fragment

Reg. No. C/61/B125.4; Area C, Sq. DD100, Locus 414, Bucket 125

Rim diam.: 13; Max h.: 4

Collared rim with tiny flange on outer lower face, two handles attached below rim. Light reddish-brown ware (5YR6/4) and reddish-yellow core (5YR6/8), a few small white grits, a few medium red and gray grits, hard fired.

Date range: late 1st – early 2nd cent. CE

70 Amphora fragment

Reg. No. C/61/B265.3; Area C, Sq. DD102, Bucket 265

Rim diam.: 12.5; Max h.: 6

Hanging down rim. Red core (2.5YR6/6), reddish-yellow wash (7.5YR7/6), a few small white and red grits, medium fired.

Date range: late 1st – early 2nd cent. CE

71 Amphora fragment

Reg. No. A/72/L752; Area A, Locus 752

High max: 9

Base fragment. Very pale brown ware (10YR7/4), many minute black grits, many small gold mica grits, hard fired.

Date range: late 1st – early 2nd cent. CE

72 Amphora fragment

Reg. No. A/72/B453; Area A, Locus 752, Bucket 453

Rim diam.: 12; Max h.: 9

Knobbed rim, low and wide neck, two handles below rim. Very pale brown ware (10YR8/3) and strong brown core (5YR5/6), a few minute white and red grits, many minute gold mica grits, hard fired.

Date range: 3rd–4th cents. CE

73 Amphora fragment

Reg. No. C/61/B222; Area C, Sq. DD100, Locus 414, Bucket 222

Rim diam.: 12.5; Max h.: 4.5

Knobbed rim, low and wide neck. Very pale brown ware (10YR7/4) and pink core (7YR7/4), small moderate white grits, medium fired.

Date range: 3rd–4th cents. CE

74 Amphora fragment

Reg. No. A/72/B442; Area A, Locus 752, Bucket 442

Rim diam.: 9.8; Max h.: 11.5

Thick and flared rim, flared neck and broad shoulder, two handles attached from rim to shoulder. Very pale brown ware (10YR7/4), many small white and many minute black grits, hard fired.

Date range: 2nd–4th cents. CE

75 Amphora fragment

Reg. No. A/72/B456.2; Area A, Locus 750, 752, Bucket 456

Rim diam.: 11.8; Max h.: 9.4

Everted rim, concaved on top, wide neck and shoulder, two handles attached from rim to shoulders. Very pale brown ware (10YR7/4), many small white grits, hard fired.

Date range: 2nd–4th cents. CE

76 Amphora fragment

Reg. No. C/61/B208.2; Area C, Sq. DD100, Locus 414, Bucket 208

Rim diam.: 15; Max h.: 8

Knobbed rim with tiny overhanging flange, wide neck. Light reddish-brown core (5YR6/4), small moderate white grits, a few medium gray grits, hard fired.

Date range: 2nd–4th cents. CE

77 Amphora fragment

Reg. No. C/61/B119; Area C, Bucket 119

Knobbed rim with tiny overhanging flange, wide neck. Very pale brown ware (10YR7/4) and red core (2.5YR6/6), small moderate white grits, medium fired.

Date range: 2nd–4th cents. CE

Amphorae of Undetermined Origin (Nos. 78–93)

Two rim fragments were found of barreled amphorae with “mushroom cap” toe, short slightly flaring neck terminating in a thickened rim with shallow gutter on top and a pair of curved handles ribbed on top (nos. 78–79). They are similar to *Ostia XVII* (Panella 1973:111, figs. 24, 189, 206 pl. XLI:568–569), *Type Qasrawet 2498* (dated to the late 4th century; Arthur and Oren 1998:201, fig. 5:8), and *Shuni A55* (Gendelman forthc. b). These vessels are clearly shown to have a typological closeness with *Agora Form G199/ MR Amphora 4/Anemurium Amphora Type A* (see above), but are made of a distinctive hard pink fabric. A single fragment from Ostia compared with a complete vessel from North Sinai, and a complete vessel and many fragments from the Caesarea and Shuni excavations (Gendelman forthc. a; forthc. b) seem to confirm Arthur and Oren’s suggestion of the Aegean origin of this type.

Two rim fragments (nos. 80–81) seem to be of a globular amphora with knob base, short neck, thickened, under-grooved rim sharpened on top and massive loop handles connected to the neck. Made of gritty hard fabric. A complete amphora of this type was unearthed in a level with finds of the 1st century BCE to the 1st century CE in an ancient village near Qalandiyeh (Magen 2004:86, figs. 105–106, pl. 4:20–22). Several fragments classified as Cyrenaican *Early Roman Amphora 14* dated from the 1st to the 3rd century CE were provided by the Benghazi/Berenice excavations (Riley 1979:170–171, figs. 78:174–177, 79:178). By contrast, however, Reynolds proposed a North Lebanese (Byblos region) origin for these fragments dated ca. 125–150 CE (Reynolds 2003:123, fig. 11a, b).

A rim fragment is characterized by a thickened rim concave on top, and oval-ridged handles, made of fabric closely resembling several Cypriote amphorae (no. 82) (such as *LRA 1 precursor/Qasrawet 2530* mentioned above). It is similar or very close to fragmentary vessels known from Qeren Naftali excavations (dated from the late 1st century BCE to the early 2nd century CE; Aviam 2004:78–79, fig. 7.17:3) and from Sabratha as *Sub-type 34u* of supposed North African origin, dated to the 1st half of the 2nd century CE (Keay 1989, fig. 15:264).

Three rim fragments (nos. 83–85) represent a variant of the bowl-mouth amphora with incurved flattened rim, made of several diverse fabrics. Similarly shaped fragmentary vessels classified as *Early Roman Amphora 13* are known from the 1st century CE deposits at Benghazi/Berenice (Riley 1979:170–171, figs. 78:172–173, 89:314).

A complete carot amphora was found with rounded shoulder, narrow barreled neck, simple rolled rim and a pair of curved handles, oval in section, connected from upper neck to the shoulder, made of hard and rough red fabric (no. 86). No exact parallels have yet been found, but fragmentary early 3rd century CE amphorae from the Beirut excavations marked as *BEY 045* of supposedly North-West Syrian origin (Reynolds 2005:565, figs. 19–22) show a great deal of similarity.

A fragment of an amphora was found with cylindrical neck and rolled rim with concave top (no. 87). Similar amphorae are known from the early 2nd century CE context in Paphos (Hayes 1991, fig. 69:12) and from Beirut, for which Reynolds proposed a Cypriot (Reynolds 1999:43, figs. 55.41, 58.150, 59.151) and later a Ras al-Basit area origin (Reynolds 2005:567, figs. 35–36).

A rim fragment was found of a small amphora with flaring rim with pronounced ridge on outer face (no. 88). It is made of reddish, rather soft, slightly micaceous fabric and seems to be related to the small footed amphorae known as *Agora M302* (Robinson 1959:112, pl. 31:M302) and *Keay LII* (Keay 1984:267–268, fig. 114:1–4). Such amphorae seem to have been produced in the 4th–6th century CE in Calabria (Arthur 1989) and in other not as yet identified centers in the Eastern Mediterranean (Sciallano and Sibella 1994:106). Due to their fragmentary state and the lack of good comparisons at this stage of research, it is not possible to determine the origin of the specimens from Jaffa.

Several fragmentary amphorae from Jaffa belong to a newly identified type that may be reconstructed as a small to medium-sized amphora with a hollow spike, a barreled, wheel-ridged body, rounded shoulder, short cylindrical neck and loop handles, lentoid in section, connected from mid-neck to upper shoulder (nos. 89–93). Several fragments originated from L752 that may be dated from the 1st to the 4th cent. CE (1st–3rd century seems to be a more suitable date), so it can be date-ranged accordingly.

78 Amphora fragment

Reg. No. A/72/B449.2; Area A, Locus 752, Bucket 449

Rim diam.: 14; Max h.: 12

Incurved rim, concaved flared neck, two handles attached from below rim. Light yellowish-brown ware (10YR6/4) and red core (2.5YR5/8), many large and small white grits, hard fired.

Date range: 3rd–4th cents. CE

79 Amphora fragment

Reg. No. C/61/192.1; Area C, Sq. DD100, Locus 414, Bucket 192

Rim diam.: 15; Max h.: 6.5

Knobbed rim, two handles below rim. Light yellowish-brown ware (10YR6/4) and red core (2.5YR5/6), a few small white and red grits, hard fired.

Date range: 3rd–4th cents. CE

- 80 Amphora fragment
 Reg. No. C/61/B617.5; Area C, Sq. CC100, Locus 433, Bucket 617
 Rim diam.: 12; Max h.: 6.7
 Thick rim. Yellowish-red ware (5YR5/6) and red core (2.5YR5/6), a few small white and many small volcanic grits, hard granular firing.
 Date range: 1st–3rd cents. CE
- 81 Amphora fragment
 Reg. No. C/61/B315; Area C, Bucket 315
 Rim diam.: 11; Max h.: 7.2
 Thick slightly flared rim. Light reddish-brown ware (5YR6/4) and dark gray core (5YR4/1), many small volcanic grits, hard granular firing.
 Date range: 1st–3rd cents. CE
- 82 Amphora fragment
 Reg. No. C/61/B176; Area C, Bucket 176
 Rim diam.: 12; Max h.: 7
 Thick flattened rim. Pink ware (7.5YR8/4) and light brown core (7.5YR6/4), moderate minute white and a few minute black grits, hard fired.
 Date range: late 1st cent. BCE early 2nd cent. CE
- 83 Amphora fragment
 Reg. No. C/61/B673.1; Area C, Sq. DD101, Locus 434, Bucket 673 and 642
 Rim diam.: 13; Max h.: 6
 Incurved and flattened rim, flared neck. Weak red ware (2.5YR5/4) and red core (2.5YR5/8), many minute and small white grits, hard fired.
 Date range: 1st cent. CE
- 84 Amphora fragment
 Reg. No. C/61/B194; Area C, Bucket 194
 Rim diam.: 14; Max h.: 5.3
 Incurved and flattened rim, flared neck. Very pale brown ware (10YR8/2), a few small white grits, moderate small black grits, hard fired.
 Date range: 1st cent. CE
- 85 Amphora fragment
 Reg. No. C/61/B618.3; Area C, Sq. DD102–CC102, Bucket 618
 Rim diam.: 8; Max h.: 6.5
 Incurved and flattened rim, flared neck. Red ware (2.5YR5/6), a few small white grits, a few small volcanic grits, hard fired.
 Date range: 1st cent. CE
- 86 Amphora fragment
 Reg. No. 79/A/73/168; Area A, Bucket 168
 Red ware (10R5/6), a few small white and gray grits, hard fired.
 Date range: early 3rd cent. CE
- 87 Amphora fragment
 Reg. No. C/61/B228; Area C, Bucket 228
 Rolled rim with concaved top, two handles below rim. Pink ware (7.5YR7/3) and reddish-yellow core (5YR6/6), self slip, many small and a few medium white grits, many small black grits, hard and gritty firing.
 Date range: 2nd–3rd cents. CE
- 88 Amphora fragment
 Reg. No. C/61/B324.3; Area C, Sq. DD102, Locus 417, Bucket 324
 Rim diam.: 11.5; Max h.: 6
 Reddish-yellow ware (7.5YR7/6), a few small white grits, a few medium gold mica grits, hard fired.
 Date range: 4th–6th cents. CE
- 89 Amphora fragment
 Reg. No. A/72/B623.1; Area A, Locus 752, Bucket 623

Rim diam.: 8; Max h.: 4.5

Very pale brown ware (10YR7/4) and red core (2.5YR6/6), many small white grits, many small gray grits, hard and gritty fired.

Date Range: 1st – 3rd/4th cents. CE

90 Amphora fragment

Reg. No. A/73/B418.2; Area A, Locus 752, Bucket 418

Neck and rim fragment of amphoretta. Pink surface and yellowish-red core (5YR5/6). Many minute white grits, a few small black grits, a few small silver mica grits, hard gritty fired.

Date Range: 1st – 3rd/4th cents. CE

91 Amphora fragment

Reg. No. 79/A/73/105; Area A, Bucket 450

D base: 1.5; Max h.: 26

Reddish-yellow ware (5YR6/6), many medium white grits, hard fired.

Date Range: 1st – 3rd/4th cents. CE

92 Amphora fragment

Reg. No. A/73/B418.1; Area A, Locus 752, Bucket 418

Pink ware and yellowish-red core (5YR5/6), many minute white grits, a few small black grits, hard gritty fired.

Date Range: 1st – 3rd/4th cents. CE

93 Amphora fragment

Reg. No. 79/T/61/051; Area T, Bucket 51

Low thirds of an amphora. Dark reddish-gray ware (10R4/1) and weak red core (10R5/4), pinkish-white wash (5YR8/2), many minute and medium white grits, hard gritty fired.

Date Range: 1st – 3rd/4th cents. CE

Miscellanea (Nos. 94–99)

Kaplan's excavations also provided a number of amphorae fragments, each of a diverse shape and fabric, which seem to be mostly of an Eastern Mediterranean origin, but not related with any of the types known to me.⁹⁴

1. Upper fragment of an amphora with rounded shoulder, high cylindrical neck with several furrows, simple rolled rim and ovoid ridged handles connected from mid-neck to shoulder (no. 94). Made of hard red fabric, tempered with lime, salt-whitened.
2. Two rim fragments characterized by a thickened, pointed rim. Made of hard reddish-micaceous (no. 95) and yellowish fabrics (no. 96).
3. Fragment of amphora with rolled rim concave on inner face (no. 97). Made of hard reddish fabric.
4. Fragment of amphora with cylindrical neck, almost undistinguished rim, and massive loop handles. Made of hard and rough reddish fabric tempered with lime (no. 98).

94 Amphora fragment

Reg. No. 79/D/63/068; Area D, Bucket 43

Rim diam.: 6; Max h.: 11

Thickened rim, medium neck with one groove below rim and three more at middle of neck. Two handles attached from neck to wide shoulder. Red ware (2.5YR5/6), small many white grits, hard fired.

95 Amphora fragment

Reg. No. C/61/BB120; Area C, Bucket 120

Rim diam.: 9; Max h.: 7

Pink ware (7.5YR7/4) and pink and gray core (7.5YR7/4;5/1), a few minute white and medium red grits, a few minute silver mica grits, hard fired.

96 Amphora fragment

Reg. No. C/61/B304.2; Area C, Bucket 304

⁹⁴ It is also possible that some of the miscellaneous amphorae are residual and therefore earlier (i.e., Persian or Hellenistic).

Rim diam.:14; Max h.: 10

Pink ware (7.5YR8/3) and reddish-yellow core (5YR6/6), several medium and small white grits, hard fired.

97 Amphora fragment

Reg. No. C/61/B325.3; Area C, Sq. DD102, Bucket 325

Rim diam.: 10; Max h.: 5

Reddish-yellow ware (7.5YR7/6) and core (5YR6/8), a few minute white grits, hard fired.

98 Amphora fragment

Reg. No. C/61/B307; Area C, Bucket 307

Rim diam.: 7; Max h.: 4

Very pale brown ware (10YR7/4) and reddish-yellow core (5YR6/6), many small and medium white grits, hard fired.

99 Amphora fragment

Reg. No. C/61/B451.2; Area C, Bucket 451

Rim diam.: 11; Max h.: 7

Light brown ware (7.5YR6/4) and reddish-yellow core (5YR6/6). Many medium white and gray grits, a few thin silver mica grits, medium fired.

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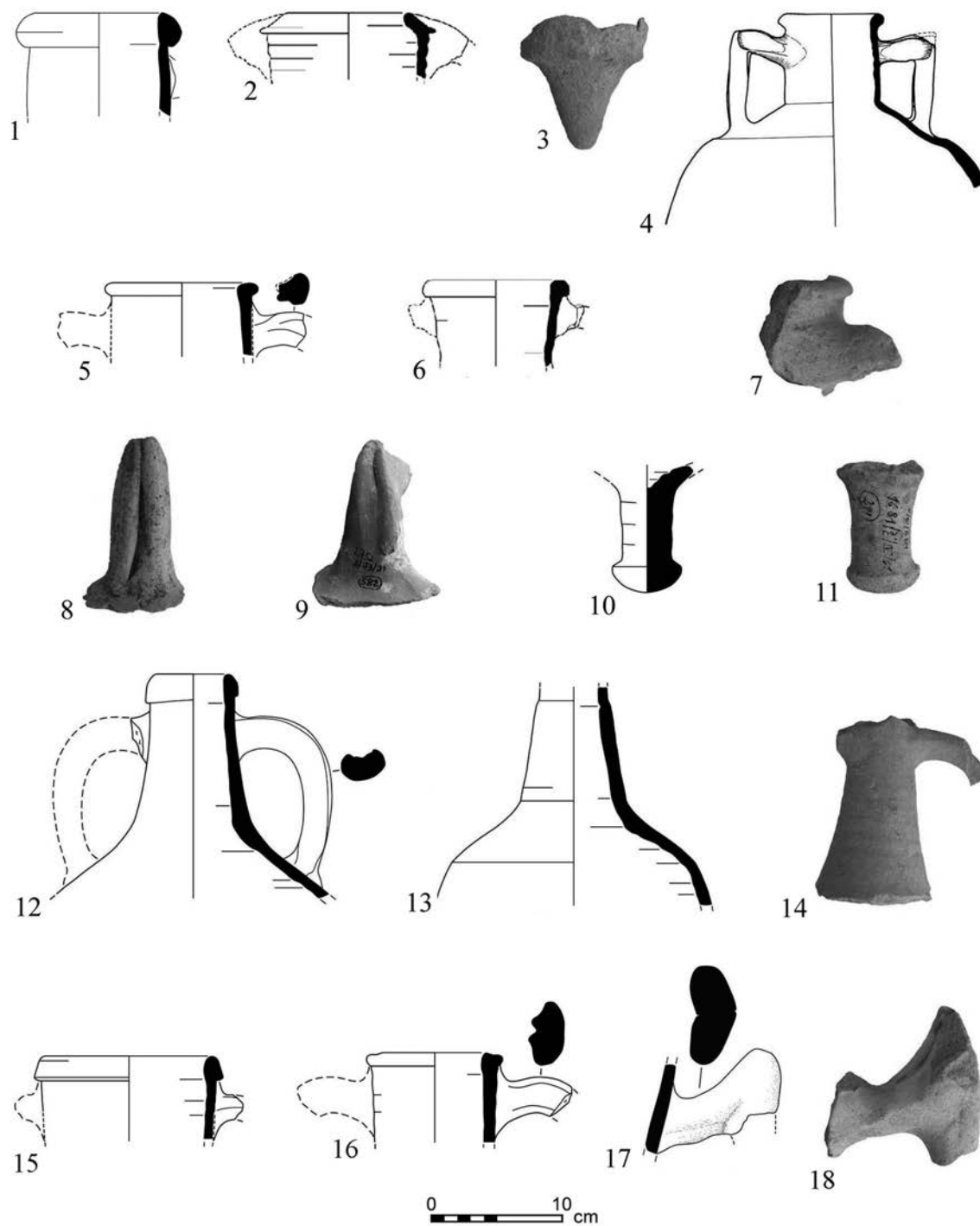


Figure 10.1. Egyptian Amphorae (1–3);
Cyprus, North Syria and Cilicia Amphorae (4–18).

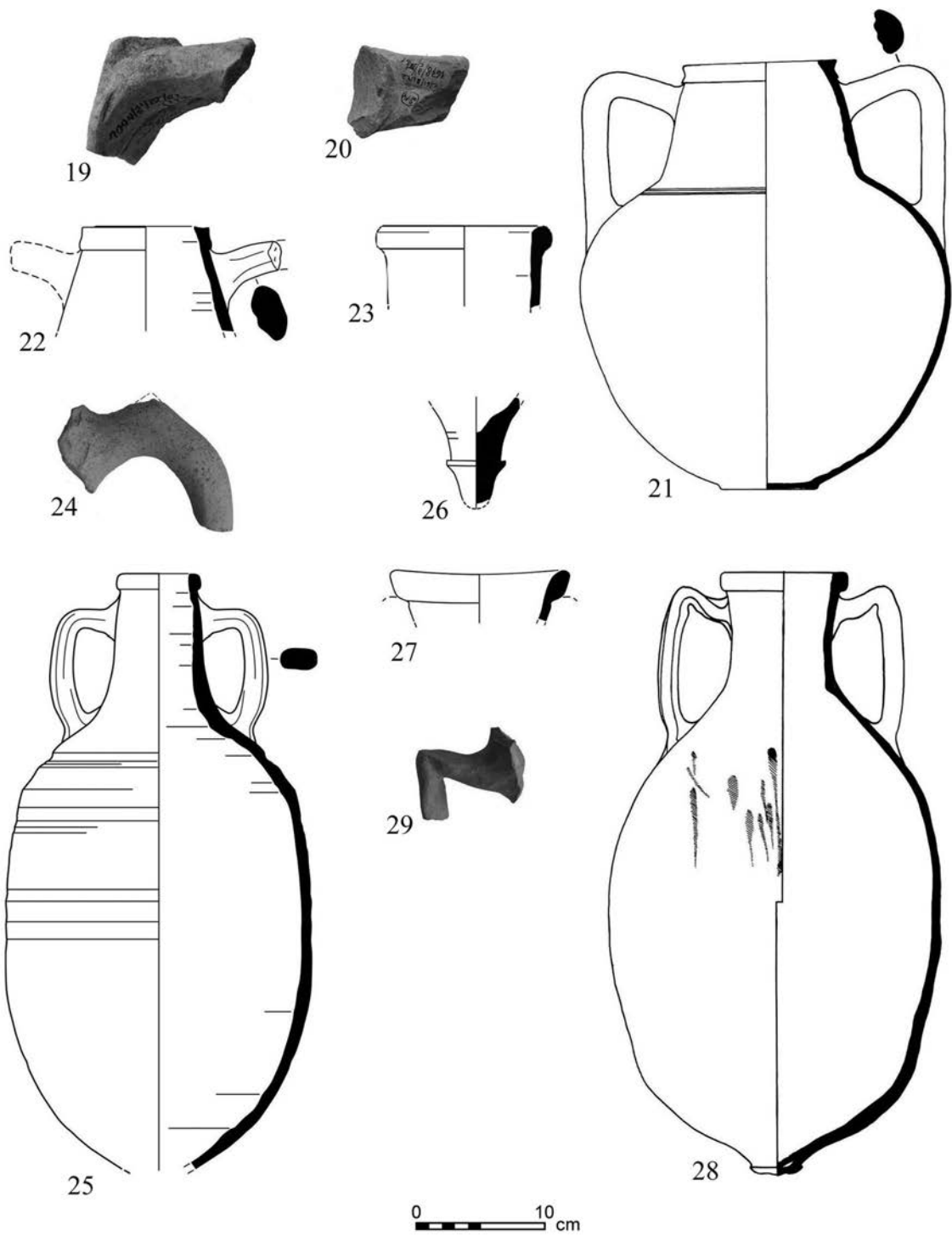


Figure 10.2. Cyprus, North Syria and Cilicia Amphorae (19–22); Aegean Amphorae (23–29).

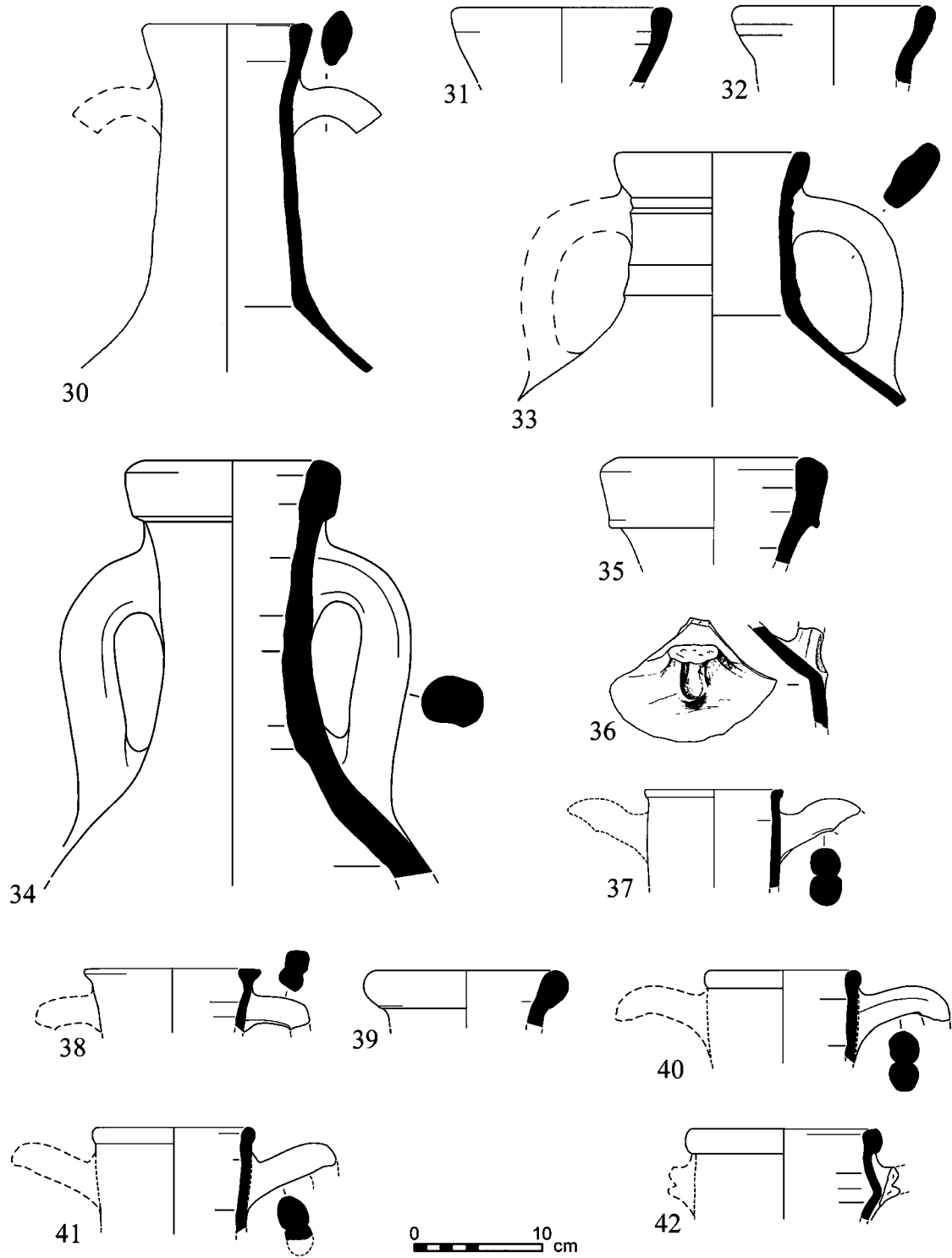


Figure 10.3. Aegean Amphorae (30–33);
Western Mediterranean Amphorae (34–42).

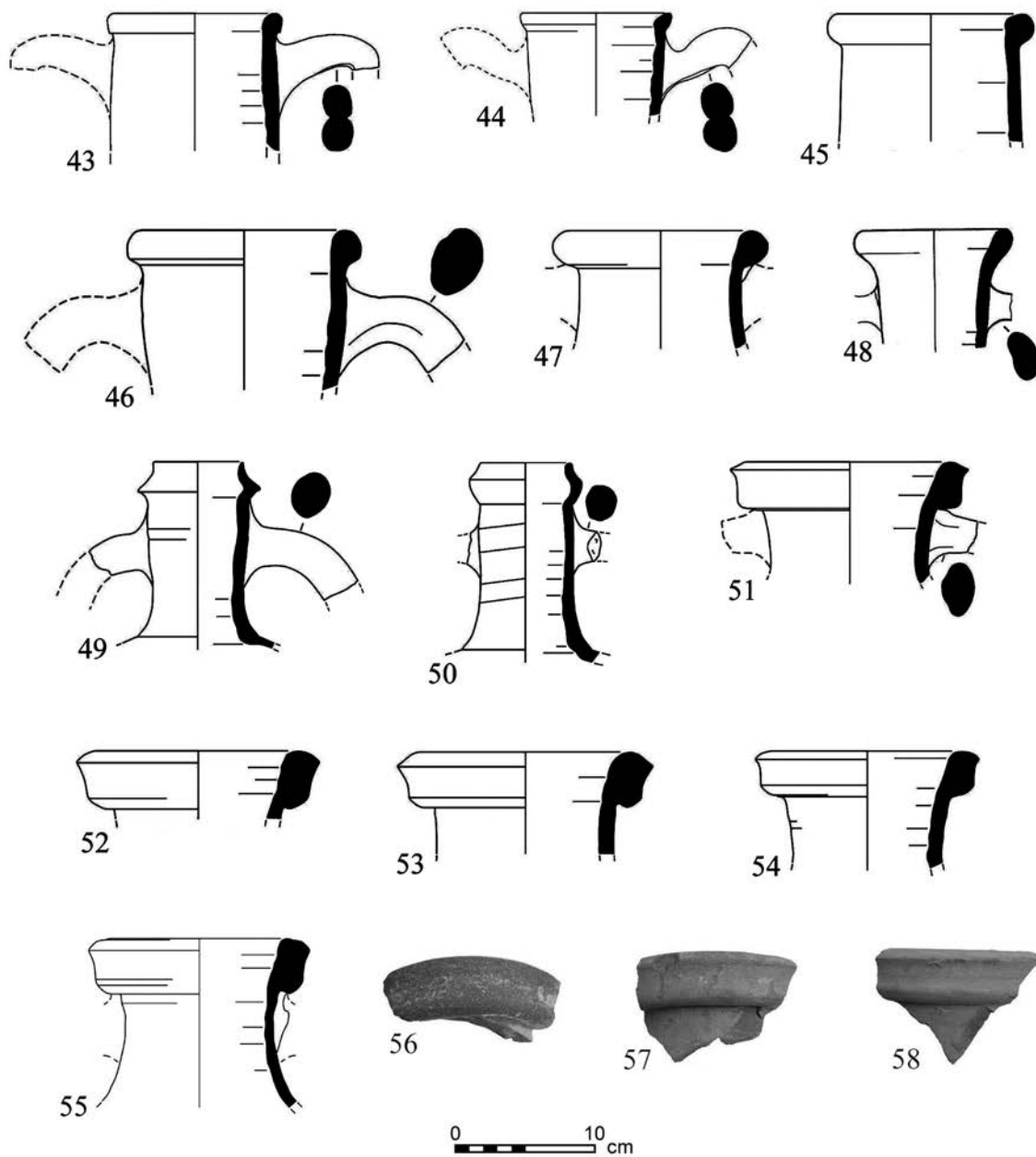


Figure 10.4. Western Mediterranean Amphorae (43–50);
North Africa Amphorae (51–58).

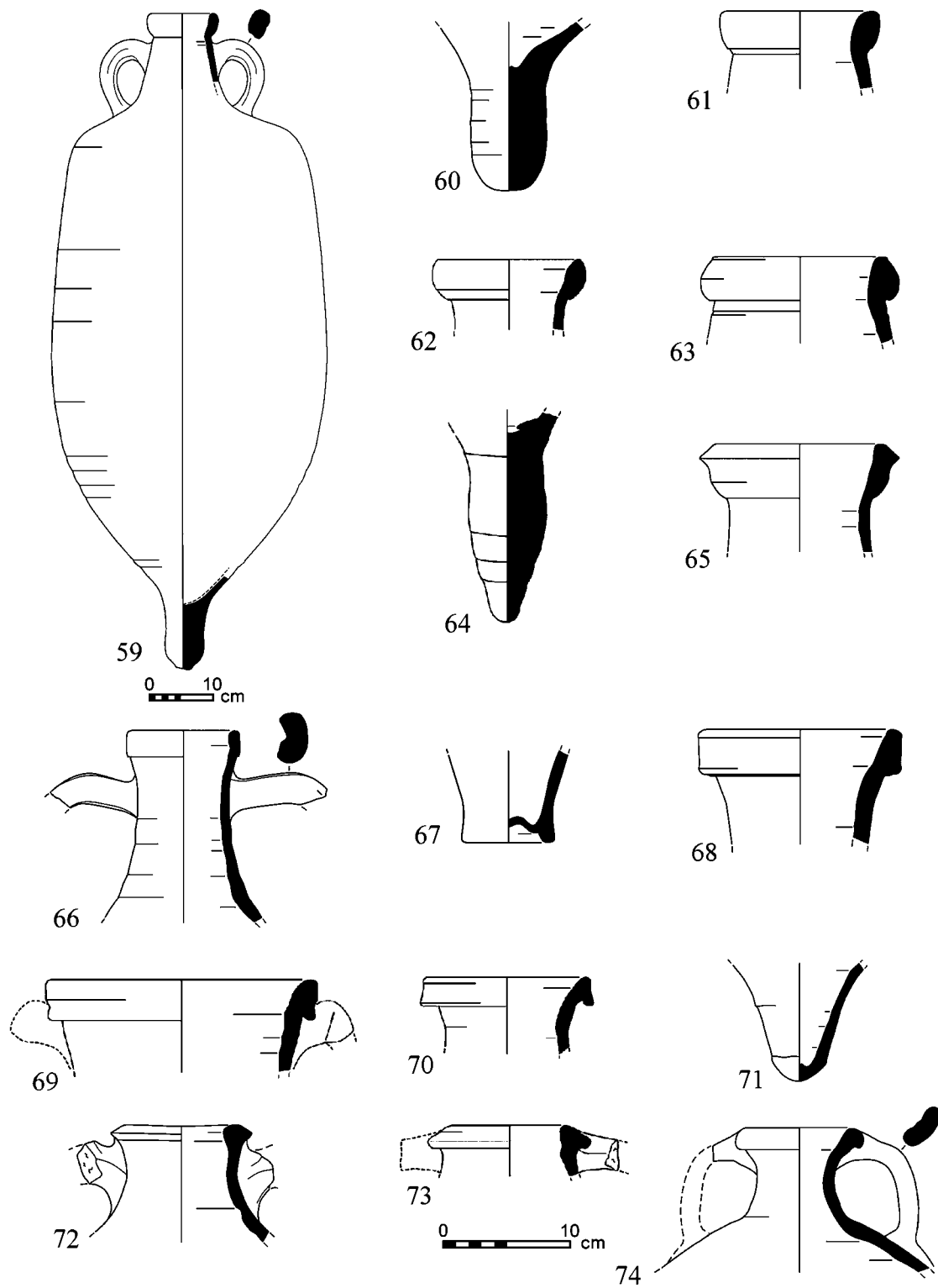


Figure 10.5. North Africa Amphorae (59–67);
Iberian Peninsula Amphorae (68–74).

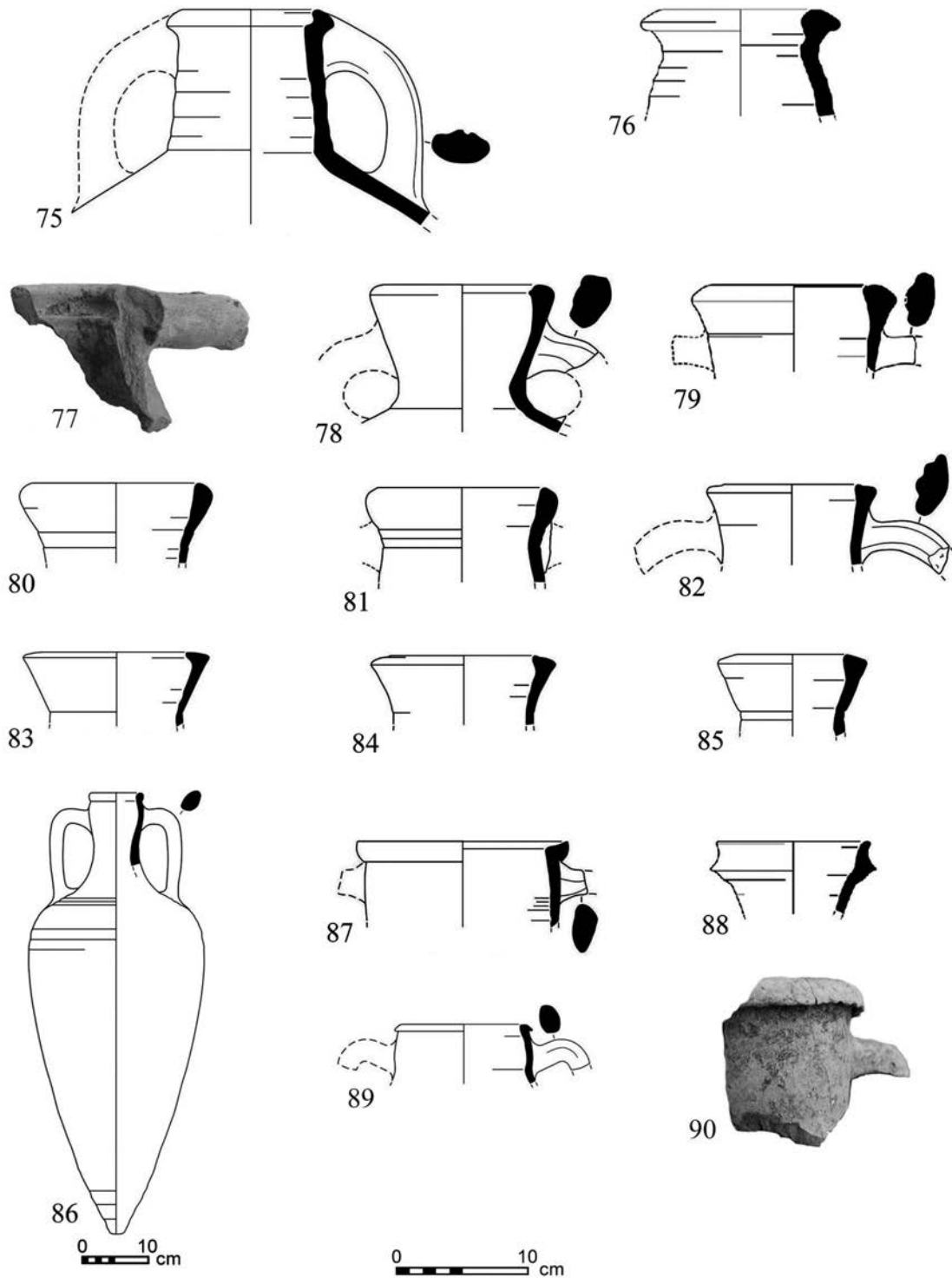


Figure 10.6. Iberian Peninsula Amphorae (75–77);
Undetermined origin (78–90).

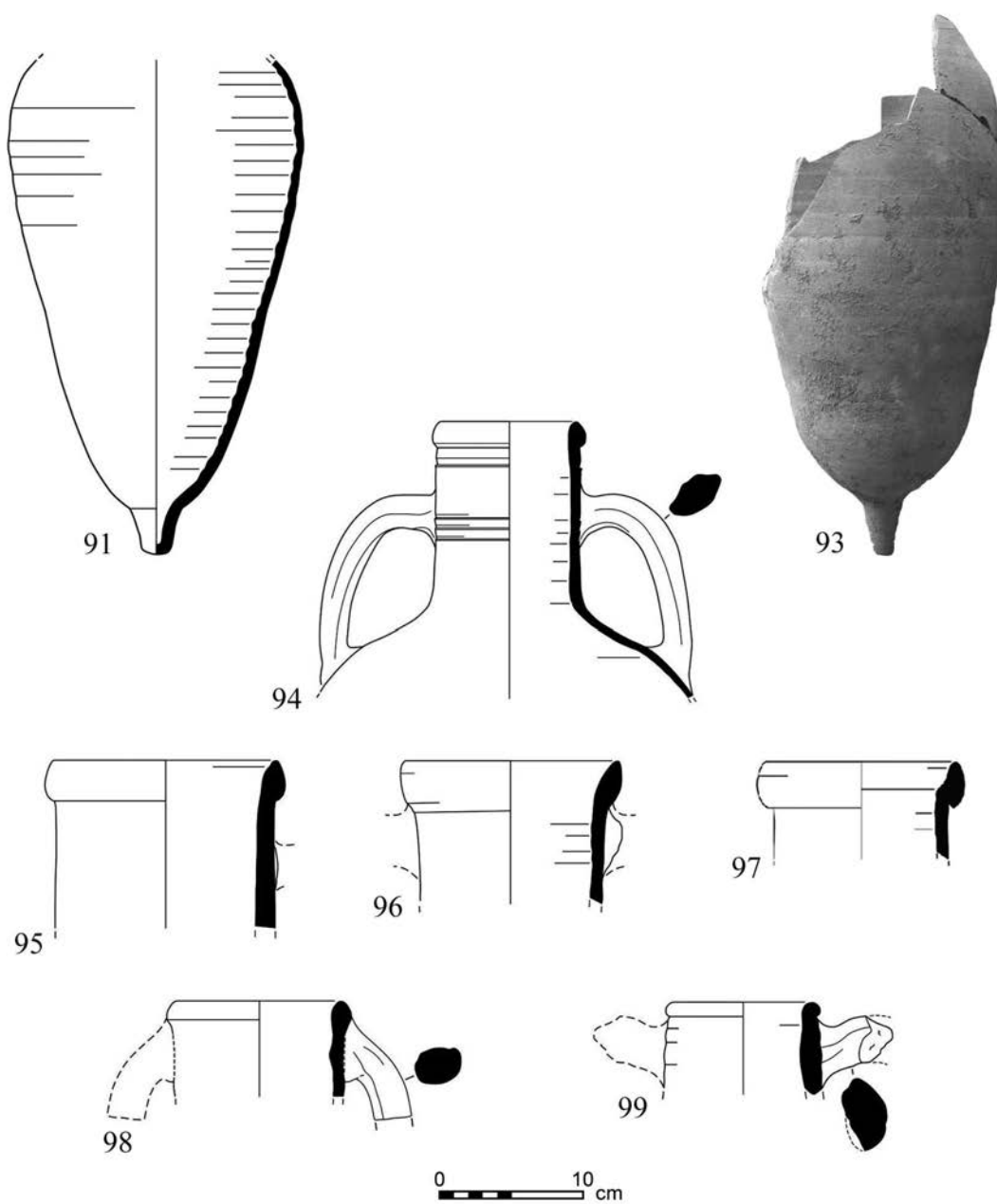


Figure 10.7. Undetermined origin Amphoras (91–99).

Chapter 11. Glass Vessels

Ruth E. Jackson-Tal

The glass vessels presented here were retrieved during various excavations by Jacob Kaplan in Jaffa.⁹⁵ The glass finds from all seasons of excavation were sorted and documented. Several hundred glass fragments were found in Jaffa, dated from the Late Hellenistic to the Islamic periods, although unfortunately mostly in insecure archaeological contexts. The Late Hellenistic, Roman, and Byzantine glass finds were separated from the Islamic glass finds, which will be the subject of a separate study. One hundred twenty-four glass fragments dated from the periods under discussion are described in the catalogue below. They were chosen according to their state of preservation and typological significance.

11.1. The Late Hellenistic Period

The Late Hellenistic vessels include a single specimen of a core-formed vessel and a large amount of cast grooved, fluted and ribbed bowls. These were found mainly in Area C, in a building dated to the Early Roman period, 1st–2nd century CE, and in Area A in a mixed context. A few vessels were found in areas G and J.

Core-Formed Vessel

The core-forming technique was used from the inception of the production of glass vessels in the mid-2nd millennium BCE. This method was used to make small, closed vessels from the Late Bronze Age until the Late Hellenistic period (Grose 1989:46). The production stages of the core-forming technique are well known and cited in several researches (Grose 1989:31; Lierke 1991:311–312; Stern and Schlick-Nolte 1994:28–30, 37–44).

The single vessel fragment found in Jaffa belongs to the Mediterranean core-formed Group III, according to its decoration and was too fragmentary to be drawn. These vessels are found throughout the Mediterranean, mainly Cyprus especially in Cyprus and Syro-Palestine. They are dated from the mid-2nd to the early 1st century BCE (Grose 1989:122). The vessels were used as containers for precious substances, and imitate mostly Greek vessel shapes. Few complete and fragmentary vessels of this group were found in small numbers in Israel (Jackson-Tal 2004a:13–16, figs. 2–5).

1 Unknown vessel

Reg. No.: C/65/563; Locus 65?, Bucket 948.

Small curved wall fragment, with yellow trails, combed in a festoon design.

Translucent green, silver weathering. Grey-brown inner core.

Parallels: Jackson-Tal 2004a: 13–16, figs. 2–5.

Date range: mid-2nd – early 1st cent. BCE

Cast Bowls

Casting was also one of the earliest methods used to make glass vessels and other glass objects from their very inception in the mid-2nd millennium BCE. The method, used to produce closed and open vessels and other objects mainly from the Late Bronze Age until the Early Roman period, originated in the metal industry (Grose 1989:47–48; Stern and Schlick-Nolte 1994:119–124, 138–155; Schlick-Nolte and Lierke 2002:26–28). The Late Hellenistic and Early Roman grooved and ribbed vessels were probably produced by the sagging/slumping technique, which derives from the casting technique (Schlick-Nolte and Lierke 2002:30–31). A large number of cast bowl fragments was found at Jaffa (47). They form the largest typological group from the site, and are divided chronologically and typologically in the discussion below. The Late Hellenistic group is significantly larger than the Early Roman group.

⁹⁵ I would like to thank Orit Tsuf for inviting me to study the glass finds from Jaffa.

During the Late Hellenistic period, everyday vessels were being produced, especially simple drinking bowls with horizontal polished and cut grooves that were apparently sagged on a former mold (Grose 1979:55–59, “Group A”; 1989:194). 33 Late Hellenistic cast bowl fragments were found in Jaffa. The majority (20) are grooved conical bowls. A few conical plain (3), ovoid (4), hemispherical (3), grooved with undefined shape (2), fluted bowls (2) and ribbed bowl (2) were found. A single convex base fragment with exterior circular grooves was also found. Most of the bowls are made of colorless and light green glass, with a few examples in yellow-brown, yellow-green, yellow, and purple. The fragments are covered with thick black and silver weathering and iridescence. Similar bowls are well known from excavations throughout Israel. They are found mostly in urban sites, in contexts dated from the mid-2nd to the 1st century BCE (Jackson-Tal 2004a:17–20, 22–24, figs. 8–10).

Date range: mid-2nd – 1st cent. BCE

Cast Conical Bowls

2 Bowl

Reg. No.: C/61/B4068; Locus 636, Bucket 4068

Rim diam.: 16

Ground flaring rim, plain conical wall with no grooves. Light yellow, white, and silver weathering, iridescence.

Parallels: Jackson-Tal 2004a:17, fig. 6:6.3.

3 Bowl

Reg. No.: C/61/661 Bucket 661

Rim diam.: 14

Rounded flaring rim, plain conical wall with no grooves. Rim and wall fragment. Yellow-brown, thick black, and silver weathering, iridescence and pitting.

Parallels: No. 3, above.

4 Bowl

Reg. No.: A/70/239 Bucket 249

Rim diam.: 15 cm.

Ground narrow vertical rim, conical plain wall. Rim and wall fragment. Colorless with yellow tinge, thick mud, and white weathering, iridescence.

Parallels: No. 3, above.

5 Bowl

Reg. No.: C/61/L647; Locus 647

Rim diam.: 19 cm.

Ground flaring rim, conical wall with three closely set inner horizontal grooves below rim. Rim and wall fragment. Light greenish, thick black and silver weathering.

Parallels: Jackson-Tal 2004a:17–19, fig. 8:8.1–8.4.

6 Bowl

Reg. No.: C/61/L247; Locus 247

Rim diam.: 16

Ground flaring rim, conical wall with three closely set inner horizontal grooves below rim. Rim and wall fragment. Light greenish, thick black and silver weathering.

Parallels: No. 5, above.

7 Bowl

Reg. No.: C/61/B639; Bucket 639

Rim diam.: 15

Ground flaring rim, conical wall with three closely set inner horizontal grooves below rim.. Rim and wall fragment. Yellowish-green, silver weathering, iridescence and pitting.

Parallels: No. 5, above.

8 Bowl

Reg. No.: A/72/086; Bucket 53

Rim diam.: 15

Ground flaring rim, thick conical wall with two inner horizontal grooves below the rim.. Rim and wall fragment. Yellow-brown, white and silver weathering, iridescence.

Parallels: No. 5, above.

9 Bowl

Reg. No.: G/64/041; Bucket 45

Rim diam.: 15

Ground flaring rim. Thick conical wall with three inner horizontal grooves below the rim. Rim and wall fragment. Colorless, dull surface, iridescence, pitting.

Parallels: No. 5, above.

10 Bowl

Reg. No.: A/70/241; Square K3, Bucket 110

Rim diam.: 13

Ground flaring rim, conical wall with two inner horizontal grooves below the rim. Rim and wall fragment. Colorless, white and silver weathering, iridescence, pitting.

Parallels: No. 5, above.

11 Bowl

Reg. No.: A/70/242, Square K3–K4, Bucket 143

Rim diam.: 17

Ground flaring rim, conical wall with three inner horizontal grooves below the rim. Rim and wall fragment. Light greenish, dull surface and silver weathering.

Parallels: No. 5, above.

12 Bowl

Reg. No.: A/70/244, Square K3, Bucket 157

Rim diam.: 18

Ground thick flaring rim, conical wall with two inner horizontal grooves below the rim. Rim and wall fragment. Greenish, white and silver weathering.

Parallels: No. 5, above.

13 Bowl

Reg. No.: A/70/245, Square K3– K4, Bucket 121

Rim diam.: 16

Polished flaring rim, conical wall with three inner horizontal grooves below the rim. Rim and wall fragment. Greenish, iridescence, pitting.

Parallels: No. 5, above.

14 Bowl

Reg. No.: J/70/76, Bucket 32

Polished flaring rim, thick conical wall with three inner horizontal grooves below rim. Small rim and wall fragment. Colorless, thick black and silver weathering, iridescence.

Parallels: No. 5, above.

15 Bowl

Reg. No.: A/72/B278; Bucket 278

Thick and ground flaring rim, thick wall with single inner horizontal groove below the rim. Small rim and wall fragment. Light green, silver weathering.

Parallels: No. 5, above.

16 Bowl

Reg. No.: A/72/B540; Locus 101, Bucket 540

Rounded, slightly flaring rim, curving in wall with two horizontal inner grooves below rim. Small rim and wall fragment. Yellow, thick golden and silver weathering.

Parallels: No. 5, above.

17 Bowl

Reg. No.: A/72/B104; Bucket 104

Ground flaring rim, with a single inner horizontal groove below the rim, curving in thick wall. Small rim and wall fragment. Colorless, thick black and silver weathering and iridescence.

Parallels: No. 5, above.

18 Bowl

Reg. No.: J/70/077; Bucket 33

Rim diam.: 13

Polished flaring rim, curving in conical wall with three sets of double horizontal grooves below the rim and on the wall. Rim and wall fragment. Colorless, thick black and silver weathering, iridescence. Severe pitting.

Parallels: Jackson-Tal 2004a:17–19, fig. 8:8.5.

19 Bowl

Reg. No.: C/61

Rim diam.: 20

Ground flaring rim, conical wall with three spaced inner horizontal grooves below rim and on the wall. Rim and wall fragment. Yellow-brown, thick silver weathering, pitting.

Parallels: No. 18, above.

20 Bowl

Reg. No.: C/61/B654; Bucket 654

Rim diam.: 15

Ground flaring rim, thick conical wall with two sets of horizontal grooves, below the rim and above the base. Rim and wall fragment. Colorless with yellow tinge, thick black and silver weathering, iridescence and pitting.

Parallels: No. 18, above.

21 Bowl

Reg. No.: C/61/B647; Locus 647

Rim diam.: 16

Ground flaring rim, conical wall with two sets of inner horizontal grooves below rim and on the wall. Rim and wall fragment. Restored. Light greenish, thick white and silver weathering, iridescence.

Parallels: No. 18, above.

22 Bowl

Reg. No.: A/70/238; Square L 4, Bucket 312

Rim diam.: 14

Ground flaring rim, thick conical wall with two sets of inner double horizontal grooves below the rim and on the wall. Rim and wall fragment. Purple, thick black, silver weathering with purple streaks.

Parallels: No. 18, above.

23 Bowl

Reg. No.: A/70/247; Square J 3, Bucket 56

Rim diam.: 15

Rounded flaring rim, conical wall with three exterior sets of double horizontal grooves, below rim and on the wall. Rim and wall fragment. Yellow-brown, silver weathering and iridescence.

Parallels: No. 18, above.

24 Bowl

Reg. No.: A/72/085; Bucket 37

Rim diam.: 14

Ground flaring rim, thick conical wall with two sets of inner double horizontal grooves, below the rim and on the wall. Rim and wall fragment. Colorless, thick black and silver weathering, iridescence, pitting.

Parallels: No. 18, above.

Cast Ovoid Grooved Bowls

25 Bowl

Reg. No.: G/64/040; Bucket 79

Rim diam.: 12

Ground vertical rim, thick wall with single inner horizontal groove below the rim. Rim and wall fragment. Yellow-green, dull surface, iridescence.

Parallels: Jackson-Tal 2004a:17–19, fig. 7.

26 Bowl

Reg. No.: C/61/L639; Locus 639

Rim diam.: 12

Ground flaring rim, conical wall with two closely set uneven inner horizontal grooves below rim. Rim and wall fragment. Yellowish-green, thick silver weathering, iridescence.

Parallels: No. 25, above

27 Bowl

Reg. No.: C/61/L656; Locus 656.

Rim diam.: 17

Ground flaring rim, conical wall with two closely set inner horizontal grooves below rim. Rim and wall fragment. Colorless with greenish tinge, thick white and silver weathering.

Parallels: No. 25, above

28 Bowl

Reg. No.: C/61/L485; Locus 485

Rim diam.: 17

Ground flaring rim, conical wall with two exterior thin horizontal grooves below rim. Rim and wall fragment. Deep yellow-brown, silver weathering and iridescence.

Parallels: No. 25, above

Cast Hemispherical Grooved Bowls

29 Bowl

Reg. No.: C/61/L470; Locus 470

Rim diam.: 15

Polished flaring rim, hemispherical wall with one inner wide horizontal groove below rim. Rim and wall fragment. Light greenish, white and silver weathering and iridescence.

Parallels: Jackson-Tal 2004a:17–19, fig. 9: 9.1–9.4.

30 Bowl

Reg. No.: A/70/246; Square K3, Bucket 161

Rim diam.: 16

Ground vertical rim, hemispherical wall with two inner horizontal grooves below rim. Rim and wall fragment, near base. Colorless, black and silver weathering, iridescence.

Parallels: No. 29, above.

31 Bowl

Reg. No.: A/70/237; Bucket 276

Rim diam.: 11

Ground vertical thick rim, hemispherical thick wall with two deep inner horizontal grooves below rim. Rim and wall fragment. Colorless, black weathering, iridescence.

Parallels: No. 29, above.

Cast Fluted Bowls

32 Bowl

Reg. No.: J/70/101, Bucket 28

Rim diam.: 10

Ground flaring rim, curved wall with exterior horizontal groove below rim and two exterior horizontal grooves on the wall above remains of vertical flutes. Rim and wall fragment. Colorless, iridescence and pitting.

Parallels: Jackson-Tal 2004a:19–20, fig. 10.

33 Bowl

Reg. No.: C/65/L639; Locus 639

Thick wall with exterior thin horizontal groove above a wider groove and above vertical close-set flutes. Wall fragment. Colorless with greenish tinge, silver weathering and iridescence.

Parallels: No. 32, above.

Cast Bowl Base

34 Bowl

Reg. No.: C/61/B639; Bucket 639

Convex cast base, with two exterior circular grooves. Curved in wall. Base and wall fragment. Colorless, thick black and white weathering.

Parallels: Jackson-Tal 2004a:19, fig. 6:6.4–6.5.

11.2. The Early Roman Period

The Early Roman vessels include a fair amount of cast grooved, ribbed and translucent bowls, a few mould-blown vessels, a skyphos handle, two aryballoids, free-blown bowls and cups, pear-shaped and candle-stick bottles. These were found mainly in Area C, in a building dated to the Early Roman period, 1st–2nd century CE. A few vessels were found in Area A in a mixed context and two pear shaped bottles were found in burials in Area T dated to the Hellenistic and Early Roman periods.

Cast Bowls

During the Early Roman period, everyday glass vessels continued to be produced, with several changes. 14 Early Roman cast bowl fragments were found at Jaffa. The majority (6) are linear-cut bowls. A few examples of ribbed (2) and translucent cast (1) bowls were found. Most of the bowls are made of colorless glass, with some examples in light yellow, yellow-brown, and deep greenish-blue (aquamarine). The fragments are covered with thick black and silver weathering and iridescence. The predominant type are the grooved linear-cut bowls that were apparently sagged on a former mold (Grose 1979:“Group D”, 63–65; 1989:247). Linear-cut bowls are dated to the last quarter of the 1st century BCE and the 1st half of the 1st century CE. Similar vessels were found throughout Israel, at Tel Michal (Kertesz 1989:367, fig. 33.1:1–4, 8), in the City of David, Jerusalem, in Stratum 5 dated till 70 CE (Ariel 1990:150, 154, fig. 28:21–22), Area A of the Jewish Quarter of Jerusalem, mainly in Strata 5 and 4 dated to the early 1st century CE (Gorin-Rosen 2003:380–381, pls. 15.3:G26–G33, 15.5:G44–G49, 15.7:G69–G72, 15.8:G79, G80, G83), and in Herodian and 1st century CE contexts in Jericho (Pritchard 1951:54, pl. 53:3; Jackson-Tal 2013a:103–104, pl.3.2:9–16, 3.3:17–23) and Cyprus (Jackson-Tal 2013b:166, pl.6.1:3–6). Additional bowls were found in Stratum II of the *officina* at ‘En Boqeq, dated to the 1st half of the 1st century CE (Jackson-Tal 2000:73–74, fig. 4.1:1, with further references), on the surface in Machaerus (Loffreda 1996:115, fig. 52:12), and in Samaria, in contexts dated to the late 1st century BCE (Crowfoot 1957:407, fig. 93:2, 4).

The linear-cut bowls found at the site can be divided into several sub-types, following Grose’s classification (1979). The first type is the deep hemispherical bowl, with a flaring or straight rim and a single or double inner horizontal grooves (35). The second type is the shallow hemispherical bowl with an inner horizontal groove below the rim, or plain (36–39). The third type is the bowl with flaring rim, straight wall and inner horizontal grooves, below the rim and above the base (40).

Ribbed bowls were found in small numbers at the site, and were also sagged on a former mold (Grose 1979:61–63, “Group C”; 1989:195). The sagged bowls are dated to the last quarter of the 1st century BCE and the 1st half of the 1st century CE (Grose 1989:244–247). The sagged bowls can be divided into two sub-types: two examples of a deep hemispherical bowl with a flaring rim, thick wall and slanted crude ribs (41, 44). This is an earlier dated type, from the Late Hellenistic period (for parallels see Jackson-Tal 2004a:21–22, fig. 13). The second type is the shallow hemispherical bowl with elongated tapering ribs, spaced or closely set (42–43). Similar bowls were found in larger numbers throughout Israel, at Tel Michal (Kertesz 1989:368,

fig. 33.1:6–7, 11–16), in the City of David, Jerusalem, in Locus 1 dated till 70 CE (Ariel 1990:154, 161, fig. 33:80–81), in Area A of the Jewish Quarter of Jerusalem, mostly in Stratum 4 dated to the mid-1st century CE (Gorin-Rosen 2003:379–380, pls. 15.2:G17, 15.5:G57, 15.6:G58–G59, 15.7:G76–G78, 15.8:G86–G87), in Jericho, in Herodian contexts (Pritchard 1951:53–54, pl. 53:1, 2, 5; Jackson-Tal 2013:105–106, pl. 3.4), Cypros (Jackson-Tal 2013b:166–167, pl.6.1:7), and in the *Officina* at ‘En Boqeq, in Stratum II, dated to the 1st half of the 1st century CE (Jackson-Tal 2000:74, fig. 4.1:3, 6–11, with further references).

A single example of a cast translucent colored bowl was found in Jaffa (45). This type was cast in double or multi-part interlocking molds, and polished into a delicate high-quality vessel (Grose 1991:9). This vessel group represents the last stage of quantity casting, before the complete transition into the blowing technique. According to Grose such bowls were a typical Early Roman product, produced in Italy and imitating well-known Early Roman ceramic, stone and metal vessel shapes (Grose 1989:255–256). Their typical carinated shape is a great change from the tradition of the Late Hellenistic and Early Roman hemispherical, conical and ovoid bowls. This group is dated to the 2nd quarter of the 1st century CE (Grose 1991:2–11). Similar vessels were rarely published from excavations in Israel, however, they are known from unpublished excavations at Herodium and Gamla.⁹⁶

Date range: Last quarter of 1st cent. BCE – 1st half of 1st cent. CE

Cast Linear Cut Bowls

35 Bowl

Reg. No.: A/70/243; Square K3, Bucket 118

Rim diam.: 16

Polished vertical thin rim, hemispherical wall with two sets of inner double horizontal grooves below rim.

Rim and wall fragment. Colorless, silver weathering, iridescence.

Parallels: Gorin-Rosen 2003:380–381, pl. 15.8: 80.

36 Bowl

Reg. No.: C/61/B592; Locus 432, Bucket 592

Rim diam.: 14

Rounded slightly flaring rim, curving in thin wall with inner horizontal groove below rim. Rim and wall fragment. Colorless, black and silver weathering, iridescence.

Parallels: Jackson-Tal 2000:73–74, fig. 4.1:1, with further references; Gorin-Rosen 2003:381, pl. 15.8:84.

37 Bowl

Reg. No.: A/72/B565; Bucket 565

Rim diam.: 10

Flaring rounded rim with a single horizontal groove below it, curving in conical wall. Rim and wall fragment. Colorless, thick black and silver weathering and iridescence.

Parallels: No. 36, above.

38 Bowl

Reg. No.: A/72/B67 Bucket 67

Rim diam.: 8

Rounded slightly flaring rim, with a single horizontal groove below it, curving in thin wall. Rim and wall fragment. Colorless, silver weathering and iridescence.

Parallels: No. 36, above.

39 Bowl

Reg. No.: A/72; Bucket 16a

Polished straight rim, with a single horizontal inner groove below the rim and curving in thin wall. Rim and wall fragment. Colorless, thick black and silver weathering and iridescence.

Parallels: No. 36, above.

⁹⁶ I would like to thank the late Professor Ehud Netzer and Danny Syon for allowing me to mention this information prior to its publication.

40 Bowl

Reg. No.: C/61/L472; Locus 472

Rim diam.: 12

Rounded slightly flaring rim, vertical wall, curving in near the base. Thin wall, with an inner horizontal groove below rim and two thin horizontal grooves above base. Rim and wall fragment. Colorless, black and silver weathering, iridescence.

Parallels: Ariel 1990:150, 154, fig. 28:21–22; Gorin-Rosen 2003:381, pl. 15.8: 83.

Cast Ribbed Bowls

41 Bowl

Reg. No.: C/61/B335; Bucket 335

Rim diam.: 11

Ground flaring rim, inner horizontal groove below rim, exterior protruding slanted crude ribs below polished band. Curving in thick wall. Rim and wall fragment. Colorless, thick white and silver weathering, iridescence.

Parallels: Jackson-Tal 2004a:21–22, fig. 13.

Date range: mid-2nd – 1st cent. BCE, included in this section because it belongs to the same typological group.

42 Bowl

Reg. No.: C/65/L448; Locus 448

Rim diam.: 14

Ground flaring rim, curving in rounded wall, with exterior even protruding thin ribs below a polished band. Rim and wall fragment. Colorless with greenish tinge, black and silver weathering, iridescence.

Parallels: Ariel 1990:161, fig. 33:80–81; Gorin-Rosen 2003:379–380, pls. 15.7:67, 15.8:87.

43 Bowl

Reg. No.: C/65/L414; Locus 414

Rim diam.: 12

Rounded flaring rim, curving in rounded wall, with exterior even protruding thin ribs below a wide polished band. Rim and wall fragment. Colorless with greenish tinge, black and silver weathering, iridescence.

Parallels: No. 36, above.

44 Bowl

Reg. No.: A/70/240, Bucket 211

Ground vertical rim, thick wall with two inner horizontal grooves below the rim and remains of two thick spaced crude ribs below a polished band. Small rim and wall fragment. Yellow, silver weathering, iridescence.

Parallels: Jackson-Tal 2004a:21–22, fig. 13.

Date range: mid-2nd – 1st cent. BCE

Cast Translucent Colored Bowl

Date range: 2nd quarter of the 1st cent. CE.

45 Bowl

Reg. No.: C/61/B661; Bucket 661

Rim diam.: 13 cm.

Ground, splaying out rim, curving in wall. Rim and wall fragment. Deep green-blue, aquamarine, iridescence and pitting.

Parallels: Grose 1991:2–11.

Blown Vessels

The invention of glass blowing probably occurred during the mid-1st century BCE. The earliest evidence for the production of blown glass was discovered in the Jewish Quarter of Jerusalem, in a deposit dated to the 2nd half of the 1st century BCE, (Avigad 1983:186–191; Israeli 1991:47; Israeli and Katsnelson 2006). Although the primary production of the early vessels was probably made by tube blowing (Israeli 1991), the dominant method for producing blown glass vessels included gathering molten glass on the end of a blowpipe and blowing a bubble, which was shaped into the desired shape, with various tools. Most of the blown vessels found in Jaffa were free-blown, and a few fragments were produced by mould-blowing. The vessels are made of colorless, light blue, light green, yellow, and yellowish-green glass. The fragments are covered with thick black and silver weathering and iridescence.

Mould-Blown Vessels

Two mould-blown vessels dated to the Early Roman period (mid-1st–2nd century CE) were found at the site. The first is a bowl fragment decorated with mould-blown ribs (46). These bowls are dated to the first half of the 1st century CE (Price 1991:64–65, and page 70 for slightly later examples from Britain). Such bowls were found throughout the Roman world, in Greece (Weinberg 1992:122, no. 93), Knossos (Price 1990:32–33, fig. 3:25–26), Eastern Turkey (Lightfoot 1993:36–37, figs. 52–54), Cyrenaica (Price 1985:293, figs. 24.3, 43–46), Britain (Price 1991:67, 70;), Italy and France (Stern 1995:113), and Vindonissa, Switzerland (Berger 1960:55, nos. 139–140, Taf. 9:139–140; 18:37). In Israel they are hardly known, but parallels were found at En-Gedi (Jackson-Tal 2005:74*, fig. 1:2) at ‘Ain ‘Arrub in the Hebron hills in a context dated to 70 CE. (Tsafrir and Zissu 2002:26, fig. 17:3), and at Bethsaida (Rottloff 2000:142, fig. 2:12, 15).

The second is a beaker decorated with mould-blown almond-shaped prunts next to small dots (47). This type is not very common in the country, although it was one of the most common mould-blown Early Roman period drinking vessels, known throughout the Roman Empire during the 2nd half of the 1st century CE (Isings 1957:45–46, form 31; Stern 1995:94, 103–108). Similar fragments were found at Mesad (Jackson-Tal 2012:179, fig. 8.1:6), in Masada (Barag 1991:139), in el-Mefjer Cave, along the eastern escarpment of Jebel Quruntul (Jackson-Tal 2002c:110, 132, fig. 6:6), at En-Gedi (Jackson-Tal 2007:480–481, Pls. 4:10, 5:3) and at ‘Ain ‘Arrub (Tsafrir and Zissu 2002:26, fig. 17:1). In recent excavations in a burial cave at Castra, an intact vessel of this type was found (Gorin-Rosen and Katsnelson 1999:27*, Color Plate 1). Additional vessels were found at Herodium (unpublished, see note 1).

46 Bowl ?

Reg. No.: C/65/L456; Locus 456

Carinated shoulder, mould blown into a ribbed design on the exterior. Wall fragment. Colorless, black and silver weathering, iridescence.

Parallels: Tsafrir and Zissu 2002:26, fig. 17: 3; Jackson-Tal 2005:74*, fig. 1: 2; Rottloff 2000:142, fig. 2: 12, 15.

Date range: 1st half of 1st cent. CE.

47 Beaker

Reg. No.: C/61/B162; Bucket 162

Straight wall mould-blown vessel with almond-shaped prunts and small dots. Mould seam mark visible. Wall fragment. Yellowish, silver weathering, iridescence.

Parallels: Jackson-Tal 2007: 481, Pl. 5: 3; Tsafrir and Zissu 2002: 26, fig. 17: 1; Gorin-Rosen and Katsnelson 1999: 27*, Color Plate 1.

Date range: 2nd half of 1st cent. CE.

Skyphos

A single example of the flattened part of a skyphos handle was found in Jaffa. This type of shallow or deep bowl was decorated with loop handles, with parallels in ceramic and metal vessels. The flattened top end

sometimes contained the artist stamp, but unfortunately the fragment found in Jaffa is not inscribed. Such vessels are dated to the 1st century CE.

Date range: 1st cent. CE.

48 Skyphos

Reg. No.: C/61/B329; Bucket 329

Stamped horizontal part of a “winged” skyphos handle. Upper handle fragment. Light yellow, silver weathering and iridescence.

Parallels: Isings 1957, form 39, 55–56.

Aryballos

Two aryballoi were found at the site in a good state of preservation. This type of vessel was found in contexts from the end of the 1st century to the 1st half of the 2nd century CE, in both the eastern and western parts of the Roman Empire. Aryballoi made of clay or glass were used mainly as oil containers in bathhouses (Barag 1985:97–98). Similar vessels were found in Early Roman contexts in ‘Ain ez-Zara (Dussart 1997:97, pl. 23:1), in the bathhouse at En-Gedi (Jackson-Tal 2007:477, 480, Pls. 2:4, 4:7), Kh. Karak/Beth Yerah (De-lougaz and Haines 1960:49, pl. 50:2; for a revised dating see Barag 1970:53), and in tombs at Amman (Harding 1946:61, pl. 20:16; Barag 1970:85–86).

Date range: end of 1st cent. – 1st half of 2nd cent. CE.

49 Aryballos

Reg. No.: C/65/539; Locus 64, Bucket 4526

Rim diam.: 3.5; Height: 7.5; Base diam.: 3

Slightly flaring rim, short neck, rounded shoulder, spherical body, flat base (no pontil mark). Two thick handles extending from shoulder to below rim. Four horizontal wheel-cut horizontal grooves on the center of the body. Intact, colorless with greenish tinge. Thick black, silver and rusty weathering.

Parallels: Jackson-Tal 2007:477, 480, Pls. 2: 4, 4:7

50 Aryballos

Reg. No.: C/61/B606; Locus 434, Bucket 606

Rim diam.: 1.3; Base diam.: 1

Infolded flattened uneven rim, short cylindrical neck, small drawn handle, flat base with pontil scar (1.5 cm). Complete rim, neck, shoulder and handle and base fragments -separated. Light bluish, black and silver weathering.

Parallels: No.49, above.

Bowls with Crimped Trail

These bowls were common throughout the Roman Empire. They are known in the region in contexts dated from the end of the 1st century to the beginning of the 3rd century CE. Bowls with a crimped trail and a single or double tubular fold were discovered in the Judean Desert caves: Cave of Horror (Barag 1962:210, fig. 4), Cave of the Pool, Cave of Letters, the Twin Cave, and Caves IV/6 and VI/52, along the Jebel Abu Saraj cliff. Several bowl rim fragments with crimped trail were found in Jaffa, and four were chosen for publication according to their shape and state of preservation.

Date range: end of 1st cent. to beginning of 3rd cent. CE.

51 Bowl

Rim diam.: 19 cm.

Reg. No.: C/65/541, Bucket 912

Outfolded wide rim, beginning of curving down thin wall. Applied crimped trail, on two sides. Four rim and wall fragments, two connecting. Colorless, black and silver weathering. Good quality.

Parallels: Barag 1963:104–105, fig. 38: 7; Bar-Adon 1989:17, fig. B2: 14; Jackson-Tal 2002b:48, 53, 63, 78, figs. 8, 34: 2.

52 Bowl

Rim diam.: 16 cm.

Reg. No.: C/61/B309; Bucket 309

Outfolded rim with applied crimped trail. Two separate rim and wall fragments. Colorless, thick black and silver weathering, iridescence and pitting.

Parallels: No. 51, above.

53 Bowl

Reg. No.: C/61/B365; Bucket 365

Rounded flaring rim with applied crimped trail. Curving down thin wall. Rim and wall fragment. Colorless, thick black and silver weathering, iridescence.

Parallels: No. 51, above.

54 Bowl

Reg. No.: C/61/B371 Bucket 371

Folded and flaring rim with applied crimped trail. Curving down thin wall. Rim and wall fragment. Colorless, thick black and silver weathering, iridescence.

Parallels: No. 51, above.

Bowls with Outfolded Decorated Rim

Bowls with outfolded and pinched decorated rims are not well known from published excavations in the area. Unpublished bowls were found in Early Roman context (late 1st–2nd cent. CE) at sites such as Caesarea, Castra and KH. Hanut.⁹⁷

Date range: late 1st–2nd cent. CE.

55 Bowl

Reg. No.: C/61/282; Bucket 720

Rim diam.: 24

Outfolded rim with beginning of curving down thin wall. Fragment of carelessly attached wavy and pinched handle. Two fragments of rim and handle, not connecting.

Parallels: Vessberg 1952:114–116, pl. 2:5.

56 Bowl

Reg. No.: C/61/282, Bucket 371

Rim diam.: 16

Outfolded rim. Fragment of applied wavy and pinched handle. Rim and wall fragment. Colorless, thick black and silver weathering, iridescence.

Parallels: No. 55, above.

Bowls with Tubular Folds

This bowl type with a single or double tubular fold was common throughout the Roman period. A few fragments were found in Jaffa. The fragments chosen for publication are dated to the Early Roman period (late 1st to mid-2nd cent. CE), according to their shape. Similar bowls were found throughout Israel, mostly in contexts dated to the 1st half of the 2nd century CE, like in 'Ain 'Arrub in the Hebron Hills, in a context dated to the Bar Kokhba revolt (Tsafirir and Zissu 2002:27–28, fig. 17:4–8). Others are known in similar contexts in the Judean Desert, sometimes with a crimped trail decoration, for example, in the Cave of Horror (Barag 1962:208–210, figs. 1, 2, 5), Cave of the Letters (Barag 1963:104–105, fig. 38:7), at Rujm el-Bahr (Bar-Adon 1989:11, fig. A11:10), in burial cave V/59 along the Jebel Qarantal escarpment (Jackson-Tal 2002b:93, 102, fig. 14:1–2), and El Mefjer Cave, along the eastern escarpment of Jebel Qarantal (Jackson-Tal 2002c:110; 126, 131, fig. 6:1), and in an Early Roman settlement at En Gedi (Jackson-Tal 2007:474–475,

⁹⁷ Similar vessels were found in the unpublished excavations of Dr. Yosef Porat at Caesarea, Dr. Zeev Yevin and Dr. Jerald Finkelstein at Castra, and Raduan Badhi at Kh. Hanut, all on behalf of the Israel Antiquities Authority. I wish to thank them for allowing me to mention this information prior to its publication.

479, 481, Pls. 1:3–5, 7, 4:2, 5:2). A similar bowl was also found in a context dated to the Bar Kokhba revolt in Wadi ed-Daliyeh in Samaria (Weinberg and Barag 1974:105, pl. 39:9).

Date range: late 1st –mid 2nd cent. CE.

57 Bowl

Reg. No.: C/61/2

Rim diam.: 12

Rounded outward splaying rim, curving in wall with large double tubular fold below the rim. Rim and wall fragment. Yellowish, black and silver weathering, iridescence.

Parallels: Tsafrir and Zissu 2002:27–28, fig. 17:4–8; Jackson-Tal 2002b:93; 102, fig. 14:1–2; Jackson-Tal 2002c:110; 126, 131, fig. 6:1.

58 Bowl

Reg. No.: C/61/L57; Locus 57

Rim diam.: 10.5

Rounded flaring rim, with exterior horizontal tubular fold below, curving in wall. Rim and wall fragment. Colorless, silver weathering and iridescence.

Parallels: No. 57, above.

59 Bowl

Reg. No.: C/61/L534; Locus 534

Rim diam.: 8

Flaring rounded rim with tubular fold below. Rim fragment. Light bluish, black and silver weathering, iridescence. Fire deformed.

Parallels: No. 57, above.

Bowls with Vertical Rim and Wall

Although only a few specimens of this type were found at the site, this bowl type was also very common throughout the Roman period (for a Late Roman example, see No. 84, below). They are distinguished according to their shape and fabric. These fragments can be dated to the Early Roman period, according to these criteria. They were free-blown with no further decoration. Straight walled beakers with straight rims are numerous in Israel and were found in the City of David, Jerusalem, in contexts dated up to 70 CE (Ariel 1990:156, 163, figs. 30:24–25; 33:90–94), in Jericho in Herodian contexts (Jackson-Tal 2013a:106–107, pl. 3.5:33–35), in Cyprus (Jackson-Tal 2013b:167, pl. 6.2:8), in Stratum II of the officina in 'En Boqeq, dated to the 1st half of the 1st century CE (Jackson-Tal 2000:75–76, fig. 4.2:5–9), in Machaerus, in a Herodian context (Loffreda 1996:15, fig. 52:6), in an Early Roman context in 'Ain ez-Zara (Dussart 1997:97, pl. 22:15–18), and in burial cave VIII/9 in the Judean Desert, dated to the Bar Kokhba revolt (Jackson-Tal 2002a:167, fig. 1:1–2).

Date range: late 1st –3rd cent. CE.

60 Bowl

Reg. No.: C/65/L438; Square DD100; Locus 438

Rim diam.: 8

Rounded vertical rim. Thin curving in wall. Rim and wall fragment. Yellowish-green, silver weathering and iridescence.

Parallels: Ariel 1990:156, 163, figs. 30:24–25; 33:90–94; Loffreda 1996:115, fig. 52:6; Dussart 1997:97, pl. 22:15–18.

61 Bowl

Reg. No.: A/72/087; Bucket 101

Rim diam.: 14

Polished vertical thin rim, curving in conical thin wall. Rim and wall fragment. Colorless, silver weathering, iridescence, severe pitting.

Parallels: No. 60, above.

Bowl with Tooled Ribs

These vessels with tooled vertical ribs are known in Early Roman contexts and could be bowls or bottles. Similar bases of ribbed vessels were common in Judaea, where they probably originated (see discussion in Katsnelson 2009:167, Fig.7, in Early Roman contexts in the City of David, Jerusalem (Ariel 1990:161–163, fig. 33:84) and in En-Gedi (Jackson-Tal 2005:75*, fig. 1:9, not ribbed), the Cave of Horror (Barag 1962:213, fig. 18), Rujm el-Bahr (Bar-Adon 1989:12–14, fig. A11:15) and the 'En Boqeq *officina* (Jackson-Tal 2000:76, fig. 4.2:11).

Date range: late 1st–2nd cent. CE.

62 Bowl

Reg. No.: C/65/L254; Locus 254

Base diam.: 2.5

Solid base, curving in wall with exterior short vertical tooled ribs. Base and wall fragment. Light blue, silver weathering, iridescence.

Parallels: Ariel 1990:161–163, fig. 33:84; Jackson-Tal 2000:76, fig. 4.2:11.

Low Tubular Bases

This type of tubular ring base was very common bowls, cups and bottles throughout the Roman period. Such low bases can usually be dated to the Early Roman period (mid-1st to 3rd cent. CE), according to their shape and fabric. Similar bases were found in Early Roman contexts in Mesad (Jackson-Tal 2012:180, fig. 8.1:9–11), Jericho (Jackson-Tal 2013a:109, pl. 3.6:54) and Ketef Jericho (Eshel and Zissu 1998:140, pl. 6:2), 'Ain ez-Zara (Dussart 1997:97–98, pl. 23:10–12), and the el-Jai Cave (Eshel and Zissu 1999:87–88, fig. 2:3),

Date range: mid-1st–2nd cent. CE.

63 Bowl

Reg. No.: C/61/286; Locus 428, Bucket 584

Base diam.: 5.2

Low tubular base, concave with large pontil scar (2 cm), curving up thin wall. Complete (after restoration) base with wall fragment. Light bluish, black and silver weathering and iridescence.

Parallels: Dussart 1997:97–98, pl. 23:10–12; Eshel and Zissu 1999:87–88, fig. 2:3.

64 Bowl

Reg. No.: C/61/287; Locus 428, Bucket 526

Base diam.: 5.7

Low tubular base, pushed in concavity, large pontil scar (2 cm). Upcurved thin wall. Complete base with wall fragment. Colorless with greenish tinge, black and silver weathering and iridescence.

Parallels: No. 63, above.

65 Cup

Reg. No.: A/58/110

Base diam.: 5.8 cm.

Low pinched tubular base, concave bottom with pontil mark (2 cm). Cylindrical wall. Complete base and wall fragment. Colorless, silver weathering and shining iridescence.

Parallels: No. 63, above.

66 Bowl

Reg. No.: A/58/112

Base diam.: 6

Low tubular base, concave bottom with pontil mark (1 cm) and glass remains. Beginning of curving out tapering wall. Complete base and wall fragment. Colorless with greenish tinge, silver weathering and shining iridescence.

Parallels: No. 63, above.

67 Cup

Reg. No.: A/58/113

Base diam.: 4.6

Low tubular base, concave bottom with pontil mark (1 cm) and glass remains. Cylindrical wall. Complete base and wall fragment. Colorless, shining iridescence, dull surface.

Parallels: No. 63, above.

Pear-shaped Bottles

Four pear-shaped bottles were found at the site. Numerous pear-shaped bottles were found in burial caves in Jerusalem, dated till 70 CE, for example in Dominus Flevit (Bagatti and Milik 1958:141, fig. 33:1–2, 5), in Binyamin Metudela Street (Rahmani 1961:114–116, pl. 17:6), and in the Akeldama tombs in the Kidron Valley (Winter 1996:96, fig. 5.2:1–2). Similar fragments were found in Early Roman contexts in Area A of the Jewish Quarter, Jerusalem (Gorin-Rosen 2003:383, pl. 15.2:G119), Jericho (Jackson-Tal 2013a:110, pl. 3.7:58–60), Cypros (Jackson-Tal 2013b:168, pl. 6.2:11), in the Cave of the Pool (Avigad 1962:178, fig. 6:1), and Masada (Barag 1991:38, not illustrated).

Date range: 1st cent. CE.

68 Bottle

Reg. No.: T/62/008; Bucket 20

Rim diam.: 2; Base diam.: 1.2; Height: 10.5

Infolded uneven flattened rim, cylindrical neck, pear-shaped elongated body, flat base with pontil mark (1.5 cm). Separate upper and lower parts, complete rim, neck and base. Colorless, thick black and silver weathering and iridescence.

Parallels: Winter 1996:96, fig. 5.2:1–2; Gorin-Rosen 2003:383, pl. 15.2:G119; Edelstein 2002:figs. 3:3–5; 13:2, 3, 5; 24:1–4.

69 Bottle

Reg. No.: C/61/278; Locus 432, Bucket 628

Base diam.: 2

Pear-shaped body, flat base with pontil mark (1.8 cm). Beginning of cylindrical neck. Complete base and body, beginning of neck. Light blue, silver weathering.

Parallels: No. 68, above.

70 Bottle

Reg. No.: T/62/009; Bucket 20

Rim diam.: 2; Base diam.: 1.4; Height: 7.4

Infolded uneven flattened rim, cylindrical neck, small pear-shaped body, flat base. Separate upper and lower parts, complete rim, neck and base. Colorless, thick black and silver weathering and iridescence. Restored.

Parallels: No. 68, above.

71 Bottle

Reg. No.: C/61/277; Bucket 654

Rim diam.: 1.4; Base diam.: 1.3; Height: 5.4

Infolded rim, elongated cylindrical neck, small pear-shaped body, flat base, slightly concave in center. Intact. Light blue, silver weathering and iridescence.

Parallels: No. 68, above.

Candle Stick Bottles

Five candle-stick bottles were found at the site (a sixth fragment cannot be identified with certainty). Candle-stick bottles are known in the region from the end of the 1st century to the 1st half of the 3rd century CE (Barag 1970:209–218, figs. 46–47). In the Akeldama tombs in the Kidron Valley a vast quantity of such bottles was found (Winter 1996:96, 98, figs. 5.3–5.5 with further references), in a Samaritan burial ground at Pardes Ha-Gedud (Jackson-Tal 2004b:143–146, figs. 11:1–2, 12:1–3, 14, 15:1), at En-Gedi (Jackson-Tal 2005:75*, Fig. 1:11–13; 2007:475–476, 480, Figs. 1:11, 4:8–9), in the Cave of the Pool (Avigad 1962:178, fig. 6:1) and in the Cave of Horror (Barag 1962:212, fig. 10).

Date range: end of the 1st cent. To the 1st half of the 3rd cent. CE.

72 Bottle

Reg. No.: C/61/276; Locus 434, Bucket 663

Rim diam.: 2; Base diam.: 2.1; Height: 6.3

Flaring and infolded rim, elongated cylindrical neck, small triangular body, flat base with pontil mark (1.5 cm). Intact. Greenish black and silver weathering and iridescence.

Parallels: Winter 1996: 96, 98, fig. 5.5 with further references.

73 Bottle

Reg. No.: C/65/540; Locus 438, Bucket 838

Base diam.: 2

Small triangular body, flat base, pontil mark and glass remains (1 cm), cylindrical neck. Complete body and base, beginning of neck. Light green, silver weathering and iridescence.

Parallels: No. 72, above.

74 Bottle

Reg. No.: C/61/280; Locus 434, Bucket 669

Base diam.: 1.3

Small spherical body, flat base (no pontil mark). Complete base. Colorless, thick black and silver weathering.

Parallels: No. 72, above.

75 Bottle

Reg. No.: A/72/B565; Bucket 565

Rim diam.: 2.3

Flaring and infolded small bottle rim. Cylindrical neck. Rim and neck fragment. Light green, black and silver weathering.

Parallels: No. 72, above.

76 Bottle

Reg. No.: C/61/B555; Locus 428, Bucket 555

Elongated cylindrical neck. Neck fragment. Light bluish, black and silver thick weathering, iridescence.

Parallels: No. 72, above.

11.3. The Late Roman–Byzantine Periods

The Late Roman–Byzantine vessels include free-blown bowls, cups, jar, bottles, tube, lamp-bowls, and wine glasses. These were found mainly in Area A in a mixed context, several in Area C in a building dated to the Early Roman period, and in mixed fills in areas D, J, and Y.

Bowls with Outfolded Rim

Bowls with outfolded rims are the most common find in Late Roman and Byzantine sites (3rd–4th cent. CE). Similar bowls were found in Late Roman–Byzantine contexts at Meẓad Tamar (Erdmann 1977:105, pl. 4:227–232) and ‘Ain ez-Zara (Dussart 1997:99, pl. 25:1–4, 7–9). Others were found in Late Roman contexts throughout the country: in Tomb XV at Hanita (Barag 1978:11, 13, figs. 5, 7), the factory dump at Jalame (Weinberg and Goldstein 1988:41, 43, fig. 4–3:13–14), Khirbet el-Ni‘ana (Gorin-Rosen and Katsnelson 2007:79–80, 129, Figs. 2:1–3, 27:3–8), and in the Painted Tomb in Ashkelon (Katsnelson 1999a:67*–68*, fig. 1:2–4).

Date range: 3rd–4th cents. CE.

77 Bowl

Reg. No.: C/61/B329; Bucket 329

Rim diam.: 14

Outfolded rim, curving down thin wall. Two separate rim and wall fragments. Colorless, thick black and silver weathering, iridescence.

Parallels: Weinberg and Goldstein 1988:41, 43, fig. 4–3:13–14; Katsnelson 1999a:67*–68*, Fig. 1:2–4.

78 Bowl

Reg. No.: A/72/B116; Bucket 116

Outfolded rim, straight wall. Small rim and wall fragment. Colorless, black and silver weathering and iridescence.

Parallels: No. 77, above.

Bowls with Flaring Rim

Bowls with flaring rims are known throughout the Roman period. The bowls found at the site belong to two different types dated to the Late Roman period (3rd–4th cents. CE). The first type, No. 79 has a cut-off flaring and straightened up rim. This type is known in Late Roman contexts in the factory dump in Jalame, plain or decorated with wheel-polished horizontal grooves (Weinberg and Goldstein 1988:94, 96, fig. 4–49:481, plain). The second type are the bowls with a thickened flaring rim, nos. 80–83. Similar bowls were found in En-Gedi (Jackson-Tal 2005:75*, 77*, fig. 2:4), in Samaria (Crowfoot 1957:410, fig. 94:15), in the factory dump in Jalame (Weinberg and Goldstein 1988:40, fig. 4–1), in Tomb XV in Hanita (Barag 1978:13–15, 21, figs. 7:16–21, 10:36, fig. 11:37–38), and in burial caves nos. 1 and 5, near Kabri (Stern and Gorin-Rosen 1997:12, 18, figs. 7:9–10, 10:1).

Date range: 3rd–4th cents. CE.

79 Bowl

Reg. No.: C/61/3

Rim diam.: 8 cm.

Cut-off, flaring and straightening up thin rim. Curving thin wall. Rim and wall fragment. Colorless, black and silver weathering, iridescence.

Parallels: Weinberg and Goldstein 1988:94, 96, fig. 4–49:481.

80 Bowl

Reg. No.: A/72/B656; Bucket 656

Rim diam.: 10

Flaring thickened rim, straight wall. Rim and wall fragment. Bluish-green, iridescence.

Parallels: Jackson-Tal 2005:75*, 77*, fig. 2:4; Stern and Gorin-Rosen 1997:12, 18, figs. 7:9–10, 10:1.

81 Bowl

Reg. No.: A/70/B146; Sq. K3–J 3, Bucket 146

Rim diam.: 12

Flaring thickened rim, curving in wall. Rim and wall fragment. Colorless, silver weathering and iridescence.

Parallels: No. 80, above.

82 Bowl

Reg. No.: A/72/B116; Bucket 116

Rim diam.: 8

Rounded flaring rim, curving in rounded wall. Rim and wall fragment. Colorless with yellow tinge, black and silver weathering.

Parallels: No. 80, above.

83 Bowl

Reg. No.: A/72/B431; Locus 750 and 752, Bucket 431

Rim diam.: 7

Rounded flaring rim, curving in thin wall. Rim and wall fragment. Colorless, thick black and silver weathering and iridescence.

Parallels: No. 80, above.

Bowl with Vertical Rim and Wall

Bowls with straight vertical rims are known throughout the Roman period (see Nos. 60–61 above, for Early Roman examples). They are distinguished according to their shape and fabric. This fragment can be dated to

the Late Roman period, according to these criteria. Bowls with straight rims appear in a variety of shapes, wide or narrow, shallow or deep. Similar bowls were found in a like contexts in the factory dump in Jalame (Weinberg and Goldstein 1988:40–41, fig. 4.2), in Tomb XV at Hanita (Barag 1978:17, 23, figs. 7:10, 11:42), burial cave no. 1, near Kabri (Stern and Gorin-Rosen 1997:12–13, fig. 7:11–12), burial caves A and B at Hurfeish (Aviam and Gorin-Rosen 1997:26, 29, 32, figs. 2:1, 4:4, 5:8, with further references).

Date range: 3rd–4th cent. CE.

84 Bowl

Reg. No.: A/72/B606; Locus 753, Bucket 606

Rim diam.: 8

Vertical rounded and thickened rim, straight wall. Rim and wall fragment. Colorless with bluish tinge, iridescence.

Parallels: Stern and Gorin-Rosen 1997:12–13, fig. 7:11–12; Aviam and Gorin-Rosen 1997:26, 29, 32, figs. 2:1, 4:4, 5:8, with further references.

Tubular, Solid and Concave Bowl Bases

Such bases were common for various bowl types throughout the Roman and Byzantine periods (3rd–7th centuries CE), and therefore their exact date is uncertain. These bases were probably part of the bowl types discussed above. Their shape and size varies, but no exact chronological data can be retrieved through their analysis. The tubular bases are the largest group of bowl bases found at the site. Similar tubular bases were found in Late Roman and Byzantine contexts in Ashkelon, Semadar Hotel (Katsnelson and Jackson-Tal 2004:100, fig. 1:4, high tubular base; 103), in the Painted Tomb in Ashkelon (Katsnelson 1999a:69*, fig. 1:5–6, solid base-rings; fig. 1:7, low tubular base-ring; fig. 1:8, high tubular base; fig. 1:9, pushed-in high base), and in the factory dump in Jalame (Weinberg and Goldstein 1988:44, fig. 4–4, tubular base-rings; 58, fig. 4–20, solid base-rings). The concave bases could belong to bowls or bottles. Similar bases were found in Late Roman and Byzantine contexts in En-Gedi (Jackson-Tal 2005:80*, fig. 3:19–22), 'Ain ez-Zara (Dussart 1997:102, pl. 28:14–14c), and the Painted Tomb in Ashkelon (Katsnelson 1999a:73–74, fig. 3:13–15).

Date range: 3rd–7th cent. CE.

85 Bowl

Reg. No.: J/70/103; Locus 1, Bucket 14

Base diam.: 5

Pushed-in tubular base with pontil mark (1.2 cm). Beginning of curving out wall. Complete base and wall fragment. Colorless, thick black and silver weathering, iridescence.

Parallels: Katsnelson 1999a:69*, fig. 1:9.

86 Bowl

Reg. No.: J/70/104; Locus 1, Bucket 12

Base diam.: 5

Tubular base ring, beginning of thin wall. Base and wall fragment. Colorless, silver weathering and iridescence.

Parallels: Weinberg and Goldstein 1988:44, fig. 4–4.

87 Bowl

Reg. No.: A/58/111

Base diam.: 8.3

Uneven and deformed low tubular base with high kick and pontil mark (1.5 cm) with glass remains. Beginning of curving up wall. Complete base, wall fragment. Light greenish, dull surface, shining iridescence. Patches of black weathering.

Parallels: See above, No.85.

88 Bowl(?)

Reg. No.: A/58/109

Base diam.: 8.3

Large low tubular base, with high kick and pontil mark (2 cm) with glass remains. Beginning of curving out thin wall. Complete base, beginning of wall. Colorless with greenish tinge, silver and black weathering, shinning iridescence.

Parallels: Katsnelson 1999a:69*, fig. 1:7.

89 Bowl

Reg. No.: A/72/B440; Bucket 440

Base diam.: 8

High folded tubular base, beginning of thin wall. Base and beginning of wall fragment. Colorless with bluish tinge, silver weathering and iridescence.

Parallels: Katsnelson and Jackson-Tal 2004:100, fig. 1:4.

90 Bowl

Reg. No.: J/70/102; Bucket 7

Base diam.: 3.3

Concaved base with pontil scar and glass remains (1 cm). Beginning of curving up thin wall. Complete base and wall fragment. Colorless, thick black and silver weathering, iridescence.

Parallels: Katsnelson 1999a:73–74, fig. 3:13–15; Jackson-Tal 2005:80*, fig. 3:19–22.

91 Bowl

Reg. No.: C/61/B378; Bucket 378

Low solid base-ring, curving up wall. Small base and wall fragment. Colorless, thick black and silver weathering, iridescence.

Parallels: Weinberg and Goldstein 1988:58, fig. 4–20.

Cup with Solid Base

Cups with cylindrical or bag-shaped bodies and solid bases, well known in the region during the Late Roman period. Similar bases were found in Late Roman contexts in the Painted Tomb in Ashkelon (Katsnelson 1999a:69*, fig. 2:1–2, with a detailed bibliography), Khirbet el-Ni'ana (Gorin-Rosen and Katsnelson 2007:93, 135, Figs. 8:3–9, 32:1–2), in the factory dump in Jalame (Weinberg and Goldstein 1988:60–61, fig. 4–23), a winepress at Akhziv (Syon 1998:95, fig. 15:3–5), and in En-Gedi (Jackson-Tal 2005:77*, fig. 2:9, 11–12; 2007:484, pl. 7:5–6).

Date range: 3rd–4th cent. CE.

92 Cup

Reg. No.: C/65/B980; Bucket 980

Base diam.: 3.2

Small tubular concave base, pontil mark with glass remains (1 cm). Flaring thin wall. Complete base, beginning of wall. Colorless with greenish tinge, silver and shinning weathering, dull surface.

Parallels: Katsnelson 1999a: 69*, fig. 2: 1–2, with a detailed bibliography.

93 Cup

Reg. No.: A/72/B628; Locus 753, Bucket 628

Base diam.: 4

Low solid base, curving out wall. Base and wall fragment. Light blue, silver weathering and iridescence.

Parallels: No. 92, above.

Trailed Base

Trail bases were made by winding glass trails around a thickened flattened base to create a ring base for beakers or bowls. This base type was common in the region during the Late Roman period (3rd–4th cent. CE), but has not been widely published. Similar bases were found in Late Roman contexts in the Painted Tomb in Ashkelon (Katsnelson 1999a:69*, fig. 2:1–2), Khirbet el-Ni'ana (Gorin-Rosen and Katsnelson 2007:88–90, 134–135, Figs. 7, 31), in the factory dump in Jalame (Weinberg and Goldstein 1988:58–59, fig. 4–21:152), in En-Gedi (Jackson-Tal 2005:77*, fig. 2:8; 2007:484, pl. 7:2–4), and in 'Ain ez-Zara (Dussart 1997:102, pl. 29:2–2b).

Date range: 3rd–4th cent. CE.

94 Cup

Reg. No.: A/72/B602; Bucket 602

Base diam.: 3

Small concave base with applied trailed base-ring, curving up thin wall. Complete base and wall fragment. Colorless with greenish tinge, black and silver weathering and iridescence.

Parallels: Gorin-Rosen and Katsnelson 2007:88–90, 134–135, Figs. 7, 31.

Cylindrical Bases

These bases could belong to cylindrical cups, jugs or bottles. Similar vessels are known mainly during the Byzantine period (5th–7th cent. CE). Similar concave bases were found in the Painted Tomb in Ashkelon (Katsnelson 1999a:74*, fig. 3:16–17) and En-Gedi (Jackson-Tal 2007:486, pl. 8:8). The concave bases could belong to the bottles with vertical rims and cylindrical necks discussed below. The tubular base probably belongs to a cup or jug. A closely shaped base was found at Ashkelon, Semadar Hotel (Katsnelson and Jackson-Tal 2004, fig. 1:13).

Date range: 5th–7th cent. CE.

95 Cup

Reg. No.: D/63/016; Locus 3, Bucket 26

Base diam.: 4.2

Pinched tubular base, concave in the center with pontil mark (1 cm). Vertical thin wall. Complete base and wall fragment. Colorless, silver weathering and iridescence.

Parallels: Katsnelson and Jackson-Tal 2004, Fig. 1: 13.

96 Cup/bottle

Reg. No.: D/63/015; Locus 3, Bucket 26

Base diam.: 2.6

Concave base with pontil mark (1.7 cm). Vertical thin wall. Complete base and wall fragment. Light purple, silver weathering and iridescence.

Parallels: Katsnelson 1999a:74*, fig. 3:16–17.

97 Cup/bottle

Reg. No.: Y/68/B75; Locus 14, Bucket 75

Base diam.: 4

Concave base with pontil mark (1.1 cm). Vertical wall. Complete base and wall fragment. Light green, silver weathering and iridescence.

Parallels: Katsnelson 1999a:74*, fig. 3:16–17.

Indented Jar

Bottles and jars decorated with rounded indentations are known during the 3rd–4th century CE. The fragment found in Jaffa belongs to a jar. Similar vessels are known in Israel in many Samaritan burials, in a mausoleum at Kh. Sabiya (Ayalon 1994, fig. 5:5), in Tomb E–220 in Samaria (Crowfoot 1957:409, fig. 94:5), in a burial cave at Kefar ‘Ara (Sussman 1976:99, pl. 28:4), in a trough burial cave in Rafidiya, Shechem (Hizmi 1997:126, fig. 6:16) and at Khirbet el-Ni‘ana (Gorin-Rosen and Katsnelson 2007:95, Fig. 9:3). Others were found at Ramat Rahel (Kochavi 1964:79, Fig. 33:5), Moza 'Illit (Gudovitch 1996:66*, Fig. 2:2, octagonal), and at Fardisya (Gorin-Rosen 2009:78*, Fig. 1:9 with further references).

Date range: 3rd–4th cent. CE.

98 Jar

Reg. No.: T/62/016

Rim diam.: 5; Base diam.: 3; Height: 6.2

Funnel-shaped, unevenly infolded wide rim, short wide cylindrical neck, squat body with four indentations (two missing). Concaved base with pontil mark (0.5 cm). Complete profile, missing small part of wall. Colorless, thick black and silver weathering and iridescence.

Parallels: Ayalon 1994, fig. 5:5; Hizmi 1997:126, fig. 6:16.

Bottles

Mould-Blown Bottle

Bottles with cylindrical or funnel-shaped necks decorated with mold-blown slanted ribs are known in Israel during the Late Roman and Byzantine periods. Bottles with a similar decoration and shape variations are known in contexts dated to the 4th and 5th century CE in two excavations at Ashkelon (Katsnelson 1999a:78*, fig. 4:9, trailed; Katsnelson and Jackson-Tal 2004:106, fig. 2:13–14). No exact parallels to the fragment found in Jaffa have been found. This fragment represents a large bottle with a wide funnel-mouthed rim.

Date range: 4th–5th cent. CE.

99 Bottle

Reg. No.: D/63/003; Locus 3, Bucket 26

Rim diam.: 7.2

Rounded flaring rim, tapering wall with mould-blown slanted horizontal ribs. Rim and wall fragment. Colorless, black and silver weathering, iridescence.

Parallels: Katsnelson and Jackson-Tal 2004:106, fig. 2:13–14.

Bottles with Funnel Shaped Rim

Bottles with a funnel-shaped rim are extremely common during the Late Roman and Byzantine periods (3rd–7th cent. CE). They appear at the site with the addition of horizontal trails, with pinched ridge or plain. Similar trailed, bottles were found in Ashkelon (Katsnelson 1999a:74*–75*, fig. 4:2, 5; Katsnelson and Jackson-Tal 2004:105, fig. 2:5), at Khirbet el-Ni‘ana (Gorin-Rosen and Katsnelson 2007:100–103, 139, Figs.13, 34:5–7) and at En-Gedi (Jackson-Tal 2005:79*, fig. 3:10–12, 2007:476, 478, figs. 1:12, 3:2).

Bottle No. 102, with a horizontal ridge below the rim is known in Late Roman contexts and was found in Khirbet el-Ni‘ana (Gorin-Rosen and Katsnelson 2007:97–98, 135, 139, Figs.10:3, 33:13). Tomb 230 in Dominus Flevit, Jerusalem (Bagatti and Milik 1958:143, fig. 33:24; for a revised dating see Barag 1970:30), En-Gedi (Jackson-Tal 2007:478, 485, figs. 2:6, 8:1–5), Jalame (Weinberg and Goldstein 1988:72–73, fig. 4–34:291–292), and Catacomb 20 in Beth She‘arim (Barag 1976:198, 200, fig. 97:1–6, 11–14).

Date range: 3rd–7th cent. CE.

100 Bottle

Reg. No.: C/61/B661; Bucket 661

Rim diam.: 6

Rounded vertical rim, vertical thin wall with applied horizontal turquoise trails below the rim. Rim and wall fragment. Colorless with turquoise trails, silver weathering and iridescence.

Parallels: Katsnelson 1999a:74*–75*, fig. 4:2, 5; Jackson-Tal 2005:79*, fig. 3:10–12.

101 Bottle

Reg. No.: A/58/107

Rim diam.: 5.8

Funnel-shaped rounded rim, with a thick horizontal trail below. Tapering neck. Complete rim and neck fragment. Colorless, thick black and silver weathering and shining iridescence.

Parallels: Gorin-Rosen and Katsnelson 2007:100, fig. 13:1.

102 Bottle

Reg. No.: A/72/2051; Locus 754, Bucket 530

Funnel-mouth rounded rim, pinched to create a small ridge below rim, beginning of tapering neck. Small rim and neck fragment. Colorless with bluish tinge, black and silver weathering.

Parallels: Barag 1976:198, 200, fig. 97:1–6, 11–14; Weinberg and Goldstein 1988:72–73, fig. 4–34:291–292.

103 Bottle

Reg. No.: A/56/309

Rim diam.: 3.6

Funnel-shaped rim, tapering neck, curving out shoulder. Delicate. Complete rim and neck, beginning of shoulder. Colorless, silver weathering and shining iridescence.

Parallels: Katsnelson 1999a:72*–73*, fig.3:4–6 (infolded rims).

Bottle with Vertical Rim and Cylindrical Neck

This type of bottle has a vertical rim, cylindrical neck, squat body and concave base. It is extremely common in Israel in contexts dated to the Byzantine period. Similar bottles were found in three excavations at Ashkelon (Katsnelson 1999a:73*–74*, fig. 3:9–15; Katsnelson 1999b:120*, fig. 9:8; Katsnelson and Jackson-Tal 2004:105, fig. 2:6–8, with further references).

Date range: 5th–7th cent. CE.

104 Bottle

Reg. No.: A/56/310

Rim diam.: 1.6

Vertical rounded rim, cylindrical neck, beginning of sloping shoulder. Complete rim and neck, beginning of shoulder. Light blue, silver weathering and shining iridescence.

Parallels: Katsnelson 1999a:73*–74*, fig. 3:9–15; Katsnelson 1999b:120*, fig. 9:8; Katsnelson and Jackson-Tal 2004:105, fig. 2:6–8.

Bottle Bases

Such bases were common for various bottle and jug types throughout the Roman and Byzantine periods, and therefore their exact date is uncertain. They were probably part of the bottle types discussed above. Their shape (tubular and concave) and size vary, but no exact chronological data can be retrieved through their analysis. Similar bases were found in Late Roman–Byzantine contexts in En-Gedi (Jackson-Tal 2005:80*, fig. 3:19–22 concave bases), the Painted Tomb in Ashkelon (Katsnelson 1999a:76*, fig. 4:17–18, splayed-out concave bases), and Jalame (Weinberg and Goldstein 1988:67–69, fig. 4–29:246–249, tubular bases).

Date range: 3rd–7th cent. CE.

105 Bottle

Reg. No.: D/63/013; Bucket 26

Base diam.: 6.5

Large tubular base ring, concave in center with pontil mark with glass remains (1.3 cm). Curving up thin wall. Complete base and beginning of wall. Colorless, silver weathering and iridescence.

Parallels: Weinberg and Goldstein 1988:67–69, fig. 4–29:246–249.

106 Bottle

Reg. No.: C/61/4

Base diam.: 10.2

Large tubular base, concave with large pontil mark (2.5 cm). Beginning of curving up thin wall. Complete base and beginning of wall. Colorless, black and silver weathering and iridescence.

Parallels: No. 105, above.

107 Bottle

Reg. No.: D/63/012; Bucket 26

Base diam.: 7.2

Large concave base ring, concave in center with pushed-in large pontil mark with glass remains (1.5 cm). Curving up wall. Base and beginning of wall fragment. Colorless, black and silver weathering, iridescence.

Parallels: Jackson-Tal 2005:80*, fig. 3:19–22.

108 Bottle

Reg. No.: D/63/014; Bucket 26

Base diam.: 4.7

Concave base with pontil mark (2 cm), curving up thick wall. Complete base and wall fragment. Colorless, silver weathering and iridescence.

Parallels: No. 107, above.

109 Bottle

Reg. No.: D/63/011; Bucket 26

Base diam.: 5.5

Tapering wall. Complete base and wall fragment. Concave base with pontil mark (1.7 cm). Colorless, iridescence and pitting.

Parallels: No. 107, above.

110 Bottle

Reg. No.: A/72/089; Bucket 595

Base diam.: 4.6

Solid splayed-out uneven base-ring, flat slightly convex bottom, beginning of wall. Base and wall fragment. Bluish-green, thick black and silver weathering, iridescence.

Parallels: Katsnelson 1999a:76*, fig. 4:17–18.

Tube

Cylindrical tubes are known from the Early Roman period (Isings 1957:41, form 27). They continued to be in use during the Late Roman period, when plain or spindle-shaped tube bottles became common throughout the Roman Empire (Isings 1957:125, form 105). The fragment found in Jaffa consists of the base and tube wall, and the exact shape of the vessel is unknown. Spindle-shaped parallels are known in Israel in contexts of the 4th century CE in Khirbet el-Ni'ana (Gorin-Rosen and Katsnelson 2007:106, Fig.14:10). Beth Shearim (Barag 1976:153, fig. 97:25) and in burial caves near Tel Zif (Kapitaikin 1997:103, fig. 6:23), and in Kibbutz Lohamei HaGetaot (Peleg 1991:141, 148, fig. 10:10–11). A plain cylindrical tube was found in a trough burial cave in Rafidiya, Shechem, dated from the 2nd half of the 3rd to the beginning of the 4th century CE (Hizmi 1997, fig. 8:8–9).

Date range: 3rd–4th cent. CE.

111 Tube

Reg. No.: A/72/093; Locus 753, Bucket 517

Rounded base, no pontil mark, hollow cylindrical tube. Colorless, black and silver weathering.

Parallels: Peleg 1991:141, 148, fig. 10:10–11; Kapitaikin 1997:103, fig. 6:23; Hizmi 1997, fig. 8:8–9.

Lamp Bowls

The lamp bowls from Jaffa can be separated into two types of oil lamps, the suspended and stemmed. Both were extremely common in Israel during the Byzantine period, when they were used in public buildings such as synagogues, churches, or in private dwellings. Bowl lamps were suspended from the ceiling by metal chains attached to the three handles. An inner wick tube was used to contain the oil and burning thread. The fragments found at the site are the base with the inner wick-tube. Suspended lamp bowls were found in Byzantine contexts in two excavations in Khirbet el-Ni'ana (Gorin-Rosen and Katsnelson 2007:116, fig. 22:4–5). En-Gedi (Jackson-Tal 2005:80*, fig. 4:4;2007:487–488, pl. 10:1–4), in Me'ad Tamar (Erdmann 1977:100, pl. 1:3–7), the 'En Boqeq *castellum* (Gichon 1993:434, pl. 60:28), Rehovot in the Negev Northern Church (Patrich 1988:134–136, pl. 12:1–13), in a tomb at Ashkelon (Katsnelson 1999a:78*, fig. 5:1–3), and in the church at Shavei Zion (Barag 1967:68–69, fig. 16:21–22).

Stemmed lamp bowls were placed by their stem in metal candelabrum. The fragment from Jaffa includes the stem fragment. Similar fragments were found in numerous excavations throughout Israel, for example Khirbet ed-Deir Monastery (Cohen 1999:149, pl. 1:1), Rehovot in the Negev Northern Church (Patrich

1988:136–139, pl. 13:14–16), in Me'ad Tamar (Erdmann 1977, pl. 3:151), in the 'En Boqeq *castellum* (Gichon 1993:434, pl. 60:37), En-Gedi (Jackson-Tal 2007:487–488, pl. 10:5), the City of David, Jerusalem (Ariel 1990:161, fig. 32:77–78), a tomb in Ashkelon (Katsnelson 1999a:79*–80*, fig. 5:5), the city wall in Caesarea (Peleg and Reich 1992:155, 158, fig. 20), and in Jalame (Weinberg and Goldstein 1988:85–86, fig. 4–44:398).

Date range: 5th–7th cent. CE.

112 Lamp bowl

Reg. No.: Y/68/2041; Locus 14, Bucket 75

Slightly concave base with pontil mark (1 cm), narrow hollow cylindrical wick tube. Base fragment and almost complete wick-tube fragment. Colorless, silver weathering, iridescence and pitting.

Parallels: Gichon 1993:434, Pl. 60:28; Katsnelson 1999a:78*, Fig. 5:1–3.

113 Lamp bowl

Reg. No.: Y/68/2042; Locus 14, Bucket 75

Slightly concave base with pontil mark (1.2 cm), thick hollow cylindrical wick tube. Base fragment and complete wick-tube fragment. Colorless, silver weathering, iridescence and pitting.

Parallels: No. 112, above.

114 Lamp bowl

Reg. No.: C/61/275

Base diam.: 0.8

Hollow cylindrical stem, flat base. Beginning of curving out thin wall. Complete stem, beginning of wall. Colorless, black and silver weathering.

Parallels: Cohen 1999:149, pl. 1:1; Katsnelson 1999a:79*–80*, fig. 5:5.

Wine Glasses

Wine glasses are one of the most common finds at Byzantine sites in the region, but are also found in Late Roman contexts. Two fragments found at the site are the base and the foot of a wine glass. Similar fragments were revealed in Late Roman contexts in Catacomb 16 in Beth She'arim (Barag 1976:205, fig. 98:4), and in a winepress at Akhziv (Syon 1998:95, fig. 15:12). Others were found in Late-Roman–Byzantine contexts in Khirbet el-Ni'ana (Gorin-Rosen and Katsnelson 2007:93–94, Fig. 8:16–17). Ashkelon (Katsnelson 1999a:70*–71*, fig. 2:9–14), the City of David, Jerusalem (Ariel 1990:161, fig. 32:74), in the glass factory in Samaria (Crowfoot 1957:404–405, 415, fig. 96:7), the Byzantine church in Shavei Zion (Barag 1967:67–68, fig. 16:15–17), and in Khirbet al-Karak (Delougaz and Haines 1960:49, pls. 50:16, 60:14–18, 21–23).

Date range: 3rd–7th cent. CE.

115 Wine glass

Reg. No.: C/61/279; Locus 413, Bucket 99

Base diam.: 5 cm.

Base and stem fragment. Tubular pushed-in base, short hollow stem rounded on top.

Light green, silver and shinning weathering, iridescence.

Parallels: Barag 1976:205, fig. 98:4; Ariel 1990:161, fig. 32:74.

116 Wine glass

Reg. No.: T/62/017

Foot and base fragment. Tubular trumpet base, hollow cylindrical foot. Colorless, thick black and silver weathering and iridescence.

Parallels: No. 115, above.

Small Finds

Head-shaped Pendant

Glass pendants shaped like demons, human heads and animals appeared in the 8th century BCE and were in use until the 1st century BCE, especially during the 4th–3rd centuries BCE. The pendants were found throughout the Mediterranean basin, but mainly on its western side and are identified as Phoenician products, distributed through trade. The pendants probably symbolized various apotropaic deities initially, and were later used mainly as jewelry (for further discussion, see Spaer 2001:155–158).

Due to their size, the pendants were made on the tip of a rod, with the glass being wound in the desired shape around a core of separating material and shaped freely or in a mold. Facial and decorative details were then added in glass drops or beads of various colors. The pendants have loops at the top so that they could be hung on a necklace, and there are visible signs of a perforation on the lower side, where the cylindrical rod was placed to form the pendant. The head bead was probably also placed in a necklace. The pendant found in Jaffa is fragmentary and cannot be attributed to a secure type. However, the remaining details (accentuated eyebrows, bulging eyes and nose), indicate a demon head type, dated to the 6th–5th cent. BCE (Spaer 2001:156–157, fig. 68).

Date range: 6th–5th cent. BCE.

117 Head shaped pendant

Reg. No.: Y/68/352; Locus 31, Bucket 182

Small demon head pendant with applied upper loop with horizontal perforation, remains of rod at the lower side of the pendant. Applied yellow highbrows and dark blue eyes. Pinched flat nose, flattened back. Upper part of pendant. Silver weathering. Opaque green background.

Parallels: Spaer 2001:156–157, fig. 68.

Spindle Whorls

These glass objects were probably used as spindle whorls, threaded on rods to create fiber. They were rod-formed and wound. The whorls are known since the 1st millennium BCE, but the majority of those found can probably be dated to the 1st–2nd century CE, when they became a common commodity (Spaer 2001:259–260). The spindle whorls found in Jaffa belong to the plain monochrome type, one with a smooth surface and the other with a stepped surface. Similar objects were found in Israel (Spaer 2001:260, for a list of references).

Date range: 1st–2nd cent. CE.

118 Spindle whorl

Reg. No.: C/61/283; Locus 429, Bucket 665

Diam.: 2.8

Convex top, flat below, spirally grooved surface, vertical perforation. Intact. Light bluish, black and silver weathering and iridescence.

Parallels: Spaer 2001:260.

119 Spindle whorl

Reg. No.: Y/68/350; Locus 3, Bucket 144

Diam.: 2.5

Convex top, flat below, plain surface, vertical perforation. Intact. Unknown color, thick black and gray weathering.

Parallels: Spaer 2001:260, Nos. 617–621.

Twisted Rods

The two fragments of twisted rods found in Jaffa probably belong to rods used for cosmetic or medicinal purposes. One rod preserved a rounded end. These objects are known from the Hellenistic period, but became more common during the Roman period (Spaer 2001:262). They were produced by tooling. Stirring rods are

known from excavations in Israel, but are not widely published. Twisted rods were found in Late Hellenistic and Early Roman contexts in Gezer (Macalister 1912, pl. 98, Tomb 117:7), in the glass workshop in the Jewish Quarter of Jerusalem (Israeli 2005:54–55, fig. 2), in Samaria (Crowfoot 1957:420), Akko (Fortuna 1965:24), and Tel Anafa (Weinberg 1970:146, pl. 81).

Date range: 1st–2nd cent. CE.

120 Rod

Reg. No.: C/61/281

End diam.: 1.2

Small part of a solid twisted rod, with uneven applied rounded end. Colorless, black and silver weathering, iridescence.

Parallels: Spaer 2001:262; Israeli 2005:54–55, fig. 2.

121 Rod

Reg. No.: J/70/105, Bucket 27.

Solid twisted rod. Rod fragment. Light green, silver weathering and iridescence.

Parallels: No. 120, above.

Inlays/Gaming Counters

These small rounded objects could have been used as inlays in pendants, rings, and other jewelry; the flat side was placed against the setting and the convex side was to be seen. Additional functions were suggested, such as game pieces, children's toys, and raw material for delicate ornamentation (Spaer 2001:253, no. 548; Ignatiadou 2002:22). Spaer suggests the objects were produced by heating chips of glass (Spaer 2001:236). Similar inlays made of glass and stone have been found in the City of David, Jerusalem, in a stratum from the Iron Age, and from the Hellenistic through the Byzantine periods (Ariel 1990:157, fig. 31:37–40). Others were found in strata dated to the Hellenistic and Early Roman periods in Area X–2 in the Jewish Quarter of Jerusalem (Gorin-Rosen 2003:388, pl. 15.9:G106), the glass workshop in the Jewish Quarter of Jerusalem (Israeli 2005:56, fig. 5), at Mareshah,⁹⁸ Samaria (Reisner et al. 1924:332, no. 5, not illustrated) Ramat Hanadiv (Cohen 2000:470, pl. 1:8), Dor (on display at the museum there) and Tel Anafa (Weinberg 1969:21–22). Two gaming pieces were found in Jaffa.

Date range: 1st cent. BCE – 1st cent. CE.

122 Gaming piece

Reg. No.: C/65/545; Locus 449?, Bucket 1012

Diam.: 1.2

Small rounded piece, flat on one side, concave on the other. Intact. Light greenish, thick silver and shiny weathering.

Parallels: Gorin-Rosen 2003:388, pl. 15.9:G106; Israeli 2005:56, fig. 5.

123 Gaming piece

Reg. No.: C/65/546; Locus 436, Bucket 828

Diam.: 0.9

Small rounded piece, flat on one side, concave on the other. Intact. Translucent brown, silver and shiny weathering. Pitted.

Parallels: No. 122, above.

⁹⁸ I would like to thank Amos Kloner for allowing me to mention this information prior to its publication.

Glass Waste

A small glass waste fragment was found at Jaffa. Glass waste remains can usually indicate the secondary production of glass vessels and objects. Although the existence of a single find denies us from further assumptions, it is possible to presume that glass production was probably part of city life from the Roman period onward.⁹⁹

124 Glass Waste

Reg. No.: C/61DD 102, Bucket 621

Twisted glass waste from the production process. Small fragment. Unknown color, silver weathering.

Summary

The majority of the vessels and small finds found in Jaffa are dated to the Late Hellenistic and Early Roman periods and originated mainly in Area C. The most dominant vessels in this class are the various types of grooved, fluted and ribbed drinking bowls, produced by casting/sagging in a former mould. In addition to these, mould-blown vessels, skyphos, aryballoi, free-blown bowls and pear-shaped and candle-stick bottles were also found. The Late Roman and Byzantine finds consist of a more diverse repertoire, composed of bowls, bottles, cups, jar, tube, lamp bowls, and wine glasses, all produced by blowing. These were found mainly in areas A and C, and in other areas. The small finds include a Persian period head-shaped pendant which is the only example of this period in the glass repertoire, spindle whorls, gaming counters and rods dated to the Late Hellenistic and Early Roman periods.

The glass vessels found at Jaffa present well-known, probably locally made types, with parallels in Israel and its surroundings. The single small find of glass waste could hint at the local production of glass vessels in Jaffa, but is far from being conclusive.

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⁹⁹ For evidence of secondary glass production in Israel, see Gorin-Rosen 2000.

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LATE HELLENISTIC PERIOD

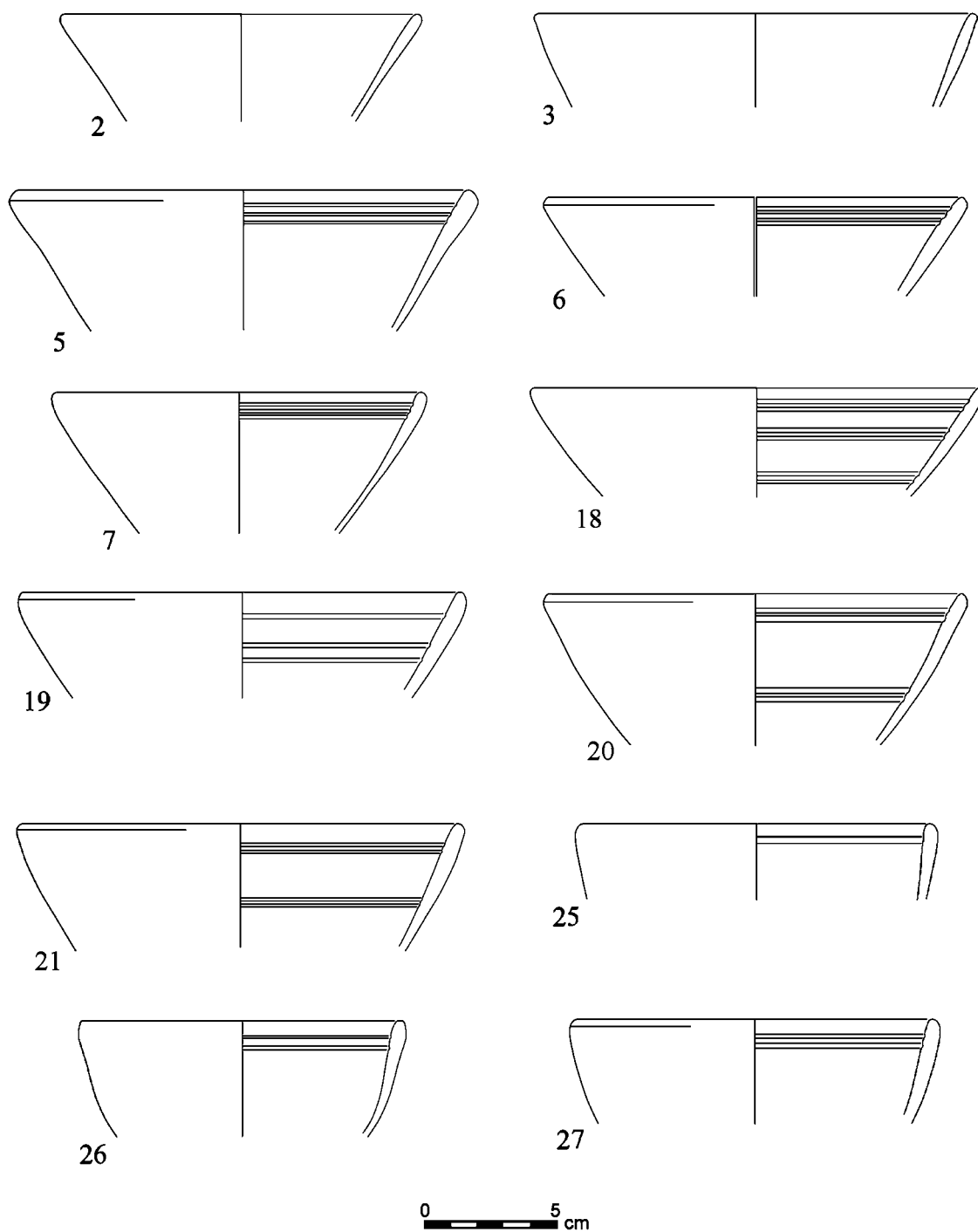
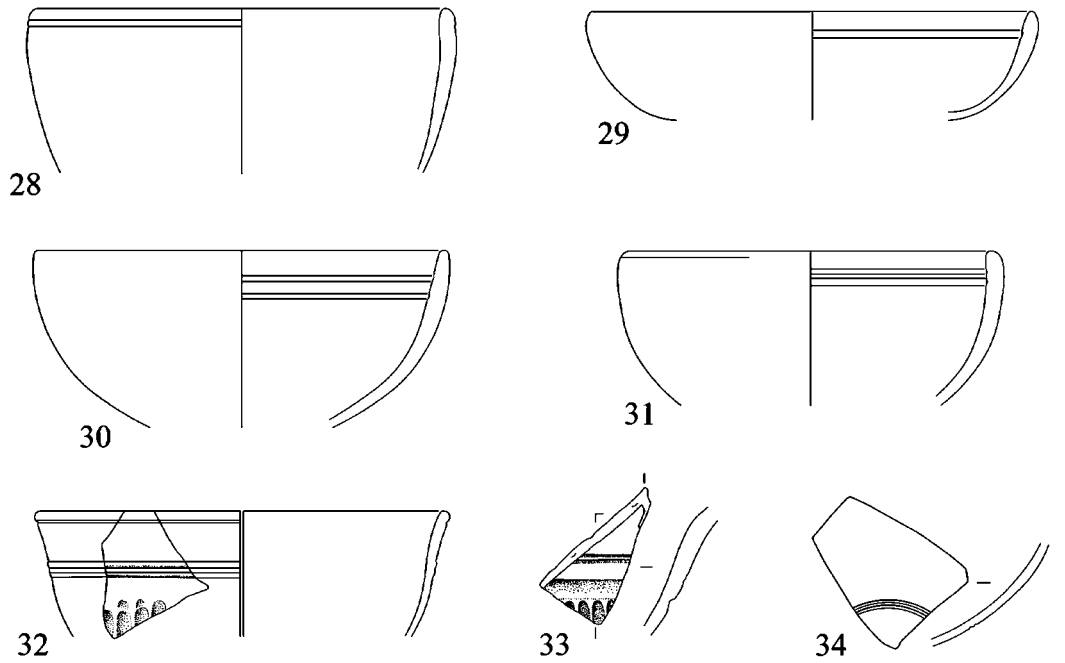


Figure 11.1. Conical Bowls (2–22), Ovoid Bowls (25–27).



EARLY ROMAN PERIOD

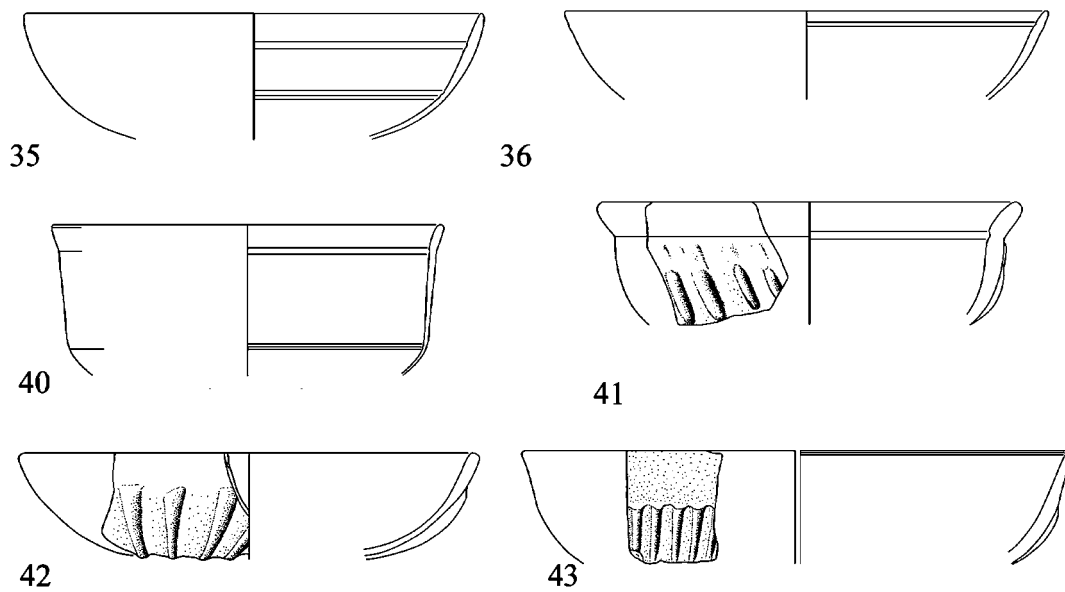


Figure 11.2. Hemispherical Bowls (28–31), Fluted Bowls (32–33), Cast Bowl Base (34), Linear-Cut Bowls (35–40), Ribbed Bowls (42–43).

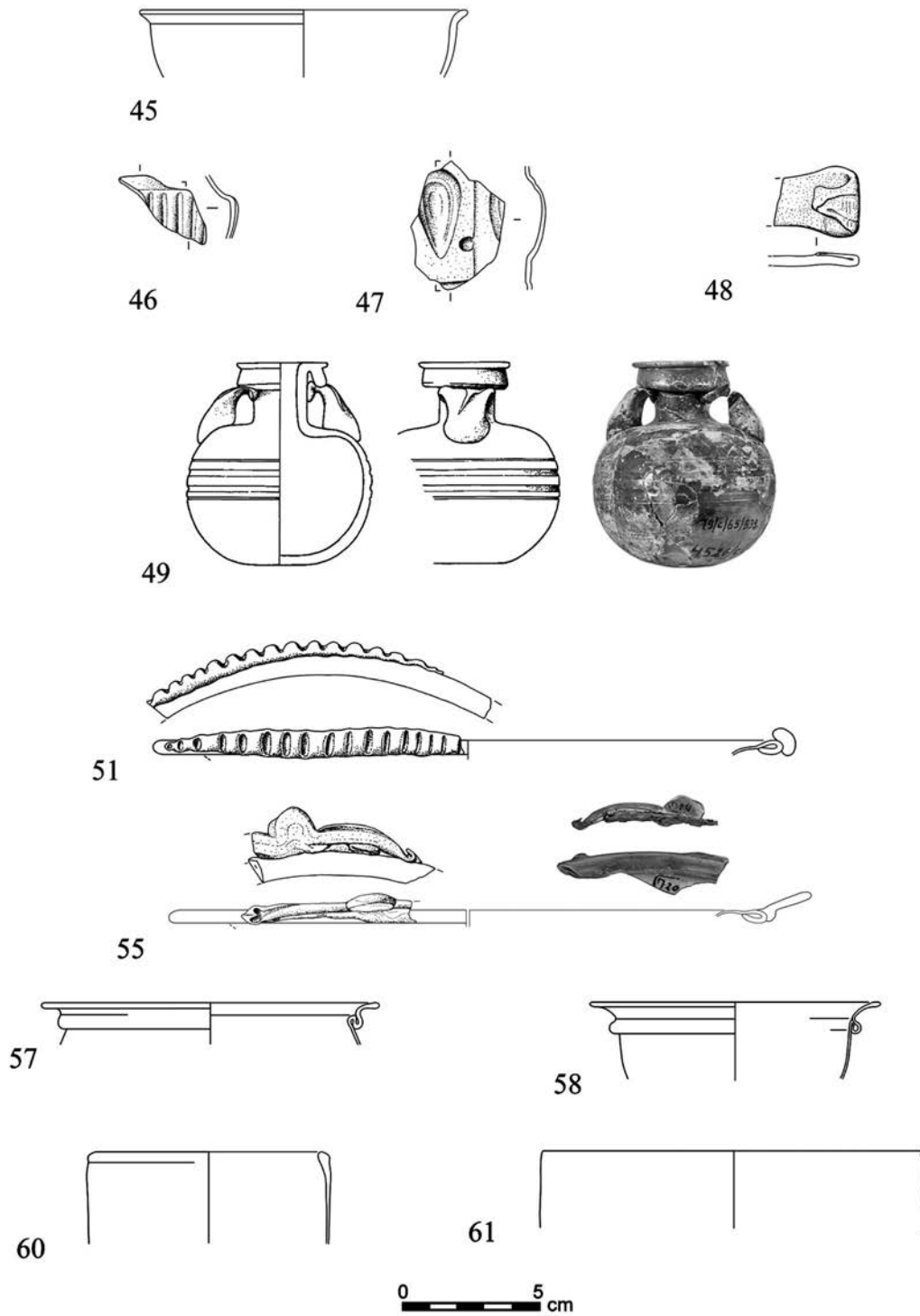


Figure 11.3. Cast Translucent Bowl (45), Mould-Blown Bowl and Beaker (46–47), Skyphos Handle (48), Aryballos (49), Bowls (51–61).

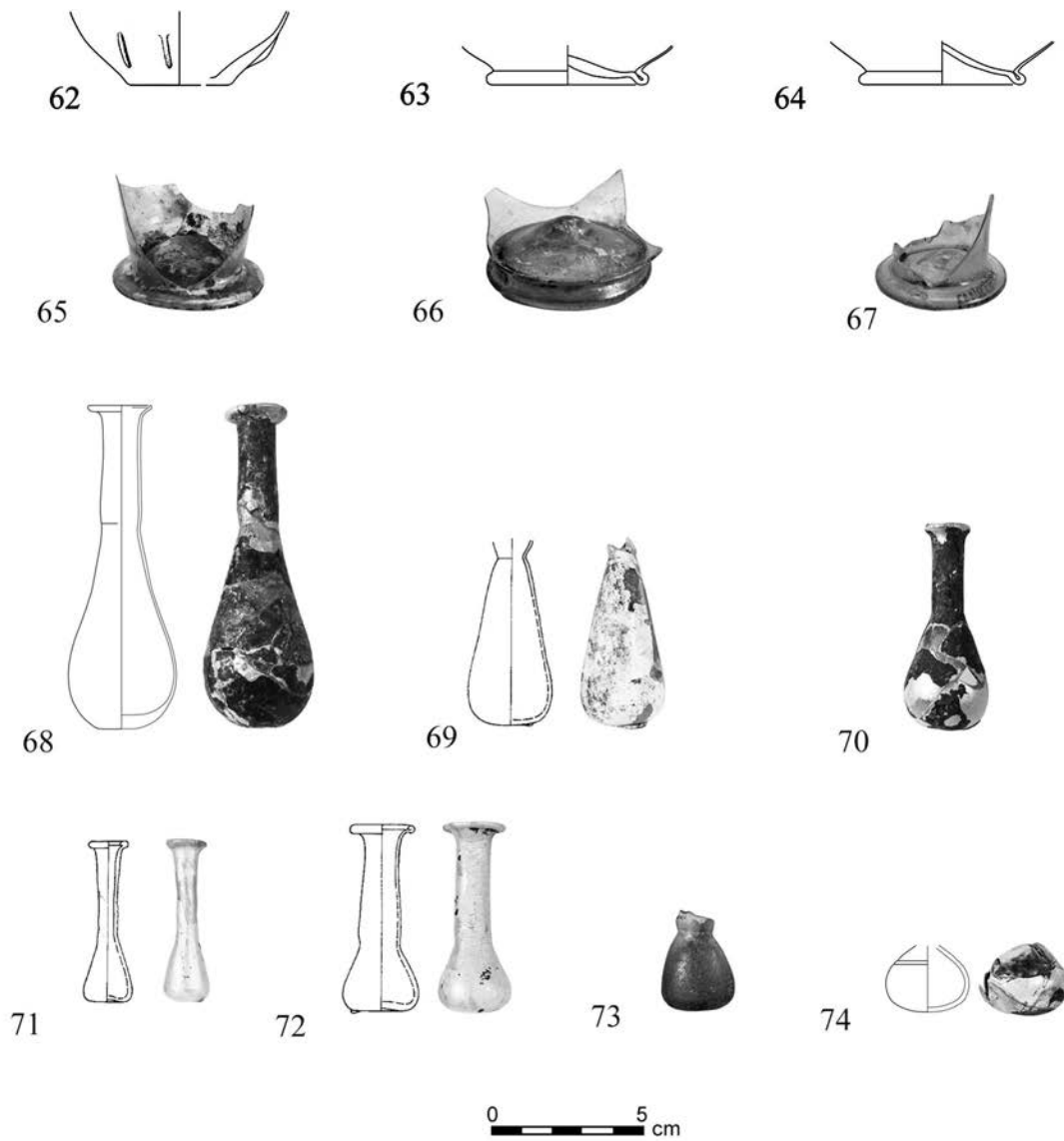


Figure 11.4. Bowls (62–67), Pear-shaped Bottles (68–71), Candle-Stick Bottles (72–74).

LATE ROMAN AND BYZANTINE PERIODS

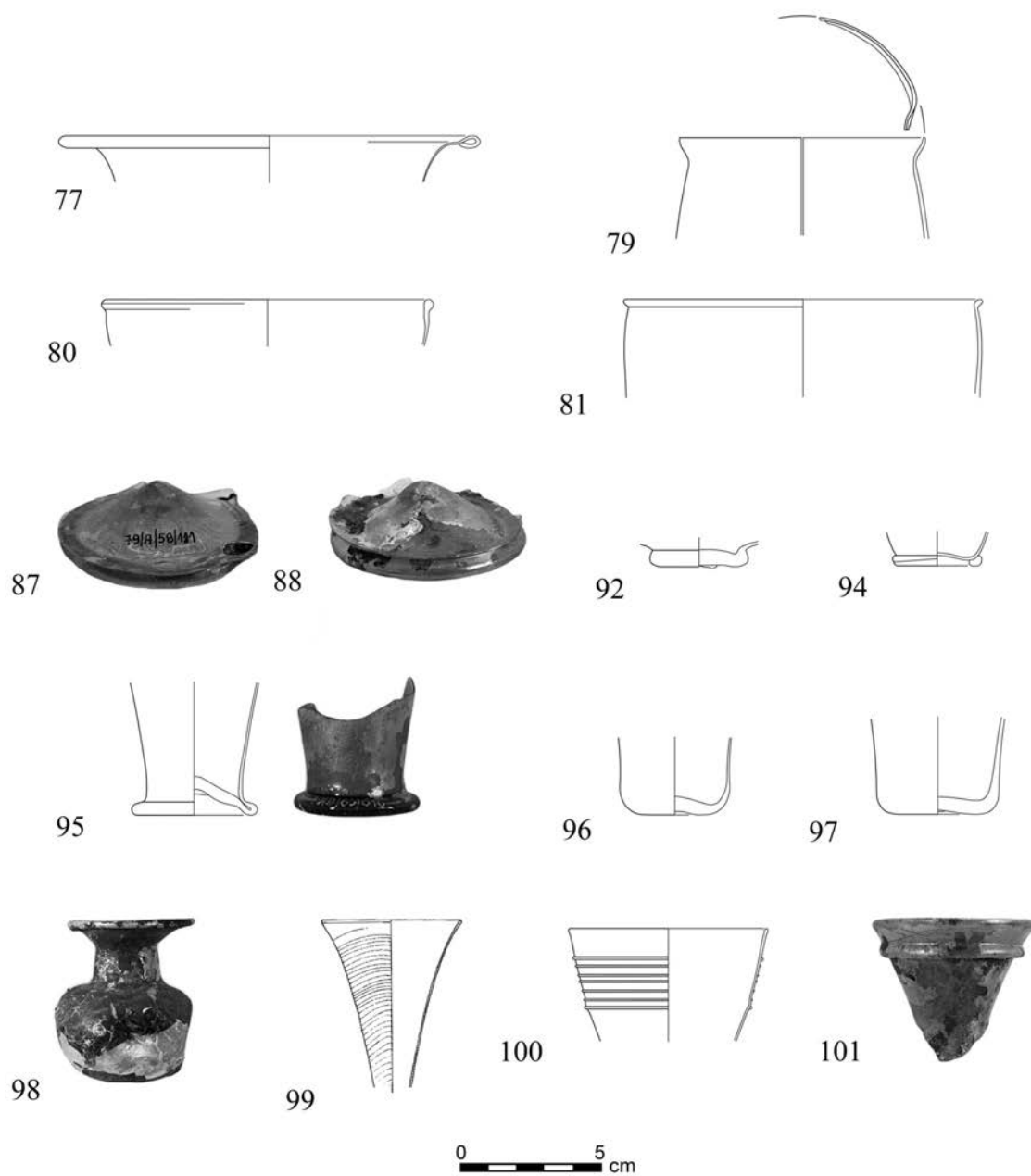


Figure 11.5. Bowls (77–88), Cups (92–97), Jar (98), Moulded Blown Bottles (99–101).

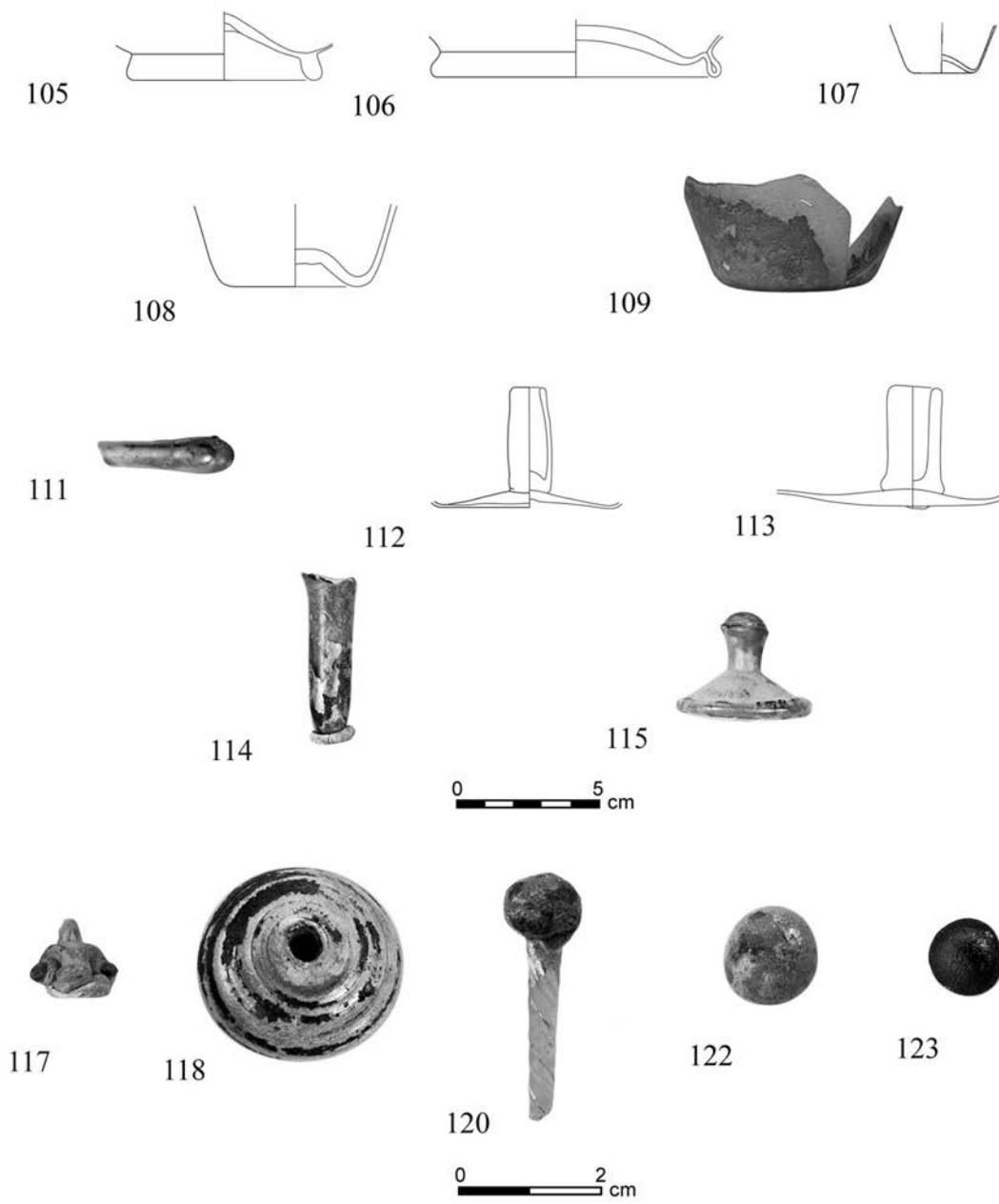


Figure 11.6. Bottle Bases (105–109), Tube (111), Lamp Bowls (112–114), Wine Glass (115), Small finds (117–123).

Chapter 12. The Metal Finds

Kate Raphael

The metal artifacts found in Kaplan's excavations present a fairly large and varied assembly. On the whole it contains an assortment of finds that come from a relatively wide time-range, starting from as early as the Iron Age and continuing through the Persian, Hellenistic, Roman, Byzantine, and Crusader periods. Over five hundred metal artifacts were unearthed during the entire course of the excavations from which one hundred and forty were chosen, which are in a good state of preservation, are of interest and importance for the reconstruction of the material culture, and shed some light on the history of the city during those centuries. The finds have been divided into groups not according to the chronological periods or the areas in which they were found, but rather according to typology. The main groups are tools, domestic utensils, jewelry, and weapons.

Among the domestic ware and kitchen utensils is a small group of tableware that includes shallow bowls, juglets, and iron knife blades of various sizes. A small and interesting collection of fine surgery, pharmaceutical, and cosmetic utensils includes a pair of tweezers, a charming round hand mirror, and a small number of probes that were common pharmaceutical instruments used for the mixing and spreading of ointments and pastes on sores and wounds. The jewelry is fairly plain and includes rings and bracelets made of copper alloys with simple incised decorations.

There are very few types of weapons. The number of arrowheads is rather high, although on the whole there are very few arrow types. The first type that was common on Persian battlefields is a three-winged bronze arrowhead. Pyramidal iron arrowheads are better known as armor piercing and were widely used in the region during the 12th and 13th centuries CE.

The most remarkable find is a small intriguing lead mask with human features.

Among the finds there was a rather large quantity of iron slag (see Table 1) probably the waste of a metal workshop. According to the field logs kept by the excavation team, a metal kiln was unearthed in Area A, squares J3–J4, near wall W.800. It seems as though the iron slag is related to the work done in the workshop around the kiln.

A few words must be said about the metals and the state of preservation. The proximity to the sea, the exposure to salts, and the humidity and high rainfall do not create favorable conditions for any type of metal whether iron or copper alloy. Some of the finds had been treated in a laboratory before being stored and are in a relatively better state of preservation than others. Most of the artifacts are made of bronze, while the minority is from iron. The state of preservation seems to vary, although in general the iron finds are usually badly corroded and cracked. The bronze finds are on the whole better preserved.

All the measurements are given in centimeters unless stated otherwise.

It should be noted that not all the objects in the catalog are photographed. The archaeological context was incorporated wherever it was possible to provide a clear archaeological date or picture of its excavated context.

12.1. Tools

12.1.1. Agricultural and Craft Tools (Nos. 1–9)

The existence of a group of eight agricultural tools among the finds of an urban settlement is not surprising as the economy of the city relied on agriculture up until the 19th century. The land, climate, and the rainfall in the region are favorable to many different crops. The soil is sandy and light and the ground water is high (Schiller 1981:44–7) providing sufficient water for cereals, vegetable crops, and various fruit trees. It seems that throughout its history, the city and its close surroundings were quite famous for their agricultural production. One of the earliest references to Jaffa's agriculture comes from the Anastasi Papyrus in which a messenger of Ramesses II (ca. 1279–1212 BCE) who had stayed in the city mentions its "gardens and orchards as well as its blacksmiths who are fine craftsmen (Tolkowsky 1926:16–17).

The tools present some of the aspects of agricultural life and the different crops that were grown in this area. However, a number of tools have no clear context and could not be accurately dated.

The two iron pruning hooks (nos. 1, 2, 3, 4) were used to trim and prune fruit trees and vines or for clearing scrub, cutting reeds and short prickly bushes such as cranberries (Avitsur 1976:154). The socket could be fitted to a long handle/pole allowing it to be used for clipping high branches.

Pruning hooks similar to those found in Jaffa were discovered at quite a few sites, such as Megiddo, Tel Qashish, Shiqmona, Nahariya, Kursi, and Sumaqa. They date from the 8th century BCE to the classical periods, early Muslim and the medieval periods and continue well into modern times (Avitzur 1976:23–24).

Apart from the pruning hook that was found in Area C, the rest of this group was unearthed in Area A, although they all seem to come from different loci. Dating those tools is difficult, as they appear in various forms from the classical period through to medieval times with only very slight changes.

The hoe, pick, and mattock (nos. 5, 7, and 8) were used to cultivate the soil. All the tools presented above were made out of iron, which was the strongest metal and therefore most suitable for rough and heavy-duty work. While some of those tools were made strictly for agricultural use, quite a few could have served for dual purposes. The chisel (nos. 6 and 9) and adze were used for crude woodwork, while the pick and the mattock could be used for masonry and construction work (White 1967:36). Similar tools for both agriculture and construction were found at Horvat ‘Ovesh in the Upper Galilee where they date to the Byzantine period (Aviam and Getzov 1998:64–83), at Tel Michal in the 5th century BCE (Muhly and Muhly 1989:67), at Tel Nahariya in Persian or Hellenistic periods (Ovadia 1993:fig. 6:2), at Tel Qashish in the Persian period (Ben-Tor et al 2003:fig. 138:21), at Sumaqa in the 1st and 2nd centuries CE (Dar 1999:fig. 39:2), and at Capernaum dated to the 7th and 8th centuries CE (Tzaferis 1989:fig 72:1). They preserve their general form and shape and continue to appear in the medieval period and in early modern times.

1 Pruning hook

Reg. No. 79/A/71/113; Area A, Bucket 754

L.: 23; W.: 5¹⁰⁰

Crescent shaped blade, with tanged handle.

Parallels: Megiddo, ca. 780–650 BCE (Lamon and Shipton 1939:pl. 82: 11); Tel Qashish, Persian period (Ben-Tor et al 2003:fig. 138:21); Nahariya Persian or Hellenistic (Ovadia 1993:fig. 6:2); Tel ‘Ira, Byzantine period (Goldsmith et al., 1999:fig.14:18, 13).

2 Pruning hook

Reg. No. 79/A/70/049; Area A, Sq. J3, Bucket 215

D. 10.3; W.: 2.5

Fragment of a wide blade that belonged to an iron sickle.

3 Pruning hook

Reg. No. 79/C/61/244; Area C, Locus 428, Bucket 576

L.: 17; W.: 3

From a 1st–2nd century CE context.

Two fragments of a short pruning hook.

Parallels: Achzib, 9th and 10th centuries BCE in a burial cave (Mazar 2003a:fig. 17:2 and Mazar 1996:170); Sardis, 7th century BCE (Waldbaum 1983:pl. 10:118, 119); Shiqmona, Byzantine period (El-gavish 1994:fig. 15); Kursi, 7th and 8th centuries CE (Tzaferis 1983:pl. XVI); Sumaqa, 1st and 2nd centuries CE (Dar 1999:fig. 39:2).

4 Pruning hook

Reg. No. 79/A/70/266; Area A, Sq. K4, Bucket 204

L.: 20; W.: 8

From Hellenistic–Early Roman context.

Handle missing. Broken and badly corroded.

5 Hoe

Reg. No. 79/A/73/074; Area A, Bucket 231

¹⁰⁰ All measurements are in centimeters unless otherwise noted.

Width of blade: 6.4; Diam. of socket: 2.8

Iron hoe with a broad blade. Narrow back and wide socket.

6 Adze

Reg. No. 79/A/72/187; Area A, Locus 748, Bucket 406

L.: 16.5; Width of blade: 6; Diam. of socket: 3

Found in mixed Crusader and Ottoman material.

Iron adze. Arched back fan shaped blade. Used for crude carpentry (Goodall 1981:53).

Parallels: Hama, medieval (Ploug 1969:63, fig. 23, 5); Capernaum, 7th and 8th centuries CE (Tzaferis 1989:fig 72: 1).

7 Pick

Reg. No. 79/A/71/112; Area A

L.: 24

Iron pick. Socket located in the center.

Parallels: Achzib, 10th and 9th centuries BCE found in a burial cave (Mazar 2003a:fig. 17:1; Mazar 1996:170); Sardis 7th BCE (Waldbaum 1983:pl. 10: 118, 119); Tel-Michal, 5th century, Persian period (Muhly and Muhly 1989:fig. 25.4:67); Sardis, Early Byzantine (Waldbaum 1983:pl. 11: 137).

8 Mattock

Reg. No. 79/A/72/186; Area A, Sq. G-2, Bucket: 382

L.: 20; W.: 8.5

Found in a Crusader Ayyubid context.

Iron mattock. Rectangular shaped head and socket. Traces of wood were found in the socket. Date: 12th–13th centuries CE.

9 Chisel

Reg. No. 79/A/72/067; Area A

L.: 15.5

Iron fragmented chisel. Rectangular section, long and tapering towards the point. Sharp edge.

12.1.2. Fishing Weights and Hooks (Nos. 10–12)

This small homogeneous group comprises a fishing hook (no. 10) and weights (nos. 11–12). The lead weights were attached to fishing nets; the hooks were used for reed rods. The weights are made out of lead that is both heavy and does not rust. The eight weights are all made in a similar fashion. Thick rectangular plates measuring 6–7 cm in length and 2–3 cm in width were folded in two so that the fishing line could be passed through with no great difficulty. The hook is made out of bronze, which tends to “suffer” less from corrosion. Since it is not barbed and fairly small it was probably suitable only for fishing off the coast in fairly shallow water.

In the nearby Jewish graveyard in Abu Kabir dated to the first century CE, a tombstone was found with a Greek inscription carved on it which mentions a family of fishermen by the name of Lisias that had once lived in Jaffa (Ilan 1981:57–59).

Similar weights were found at Shiqmona where they date to the Hellenistic period. In Corinth they date to the Roman–Byzantine periods while those found in Capernaum date to the 7th–eight century CE.

Each of those finds comes from a different area. The eight lead fishing weights all come from Area C and were presumably found together; none appear to have been found in a clear context.

10 Fishing hook

Reg. No. 79/A/56/039; Area A, Bucket 2650

L.: 4; Th.: 0.2

Bronze fishing hook.

Parallels: Tell el-‘Ajjul, XVIII Dynasty 1552–1296 BCE (Petrie 1933:pl. XXII:85–87); Shiqmona, Hellenistic (Elgavish 1974:pl. XXXII:291–2); Corinth (Davidson 1952:pl. 88:1447); Capernaum, 7th and 8th centuries CE (Tzaferis 1989:fig. 72:18).

11 Fishing weight

Reg. No. 79/J/70/126; Area J, Bucket 5

L.: 6.6; W.: 0.9

Lead fishing weight.

12 Fishing weights

Reg. No. 79/C/61/3000–3007; Area C

L.: 4.5–7.5; W.: 1–1.2

Seven lead fishing weights made out of a simple rectangular plate folded over.

Parallels: Capernaum, 7th and 8th centuries CE (Tzaferis 1989:135, fig. 72:15–6).

12.2. Domestic Utensils

12.2.1. Tableware

All the vessels belonging to this group are plain tableware. Apart from the cosmetic bowl, they are simple with no apparent decorations and seem to be mainly for utilitarian purposes. Similar wide shallow bowls (nos. 13, 16) were occasionally found among burial goods as in the case of Meqabelein that dates to the 7th century BCE (Harding 1950:pl. XIV:6), and in tombs dating to the Persian period, 6th century BCE (Stern 1973:145, fig. 239). Bronze jugs on the whole seem to be quite rare. The archaeological context is not clear and the parallels below are similar but not identical. The precise dating of this find is therefore still rather obscure. Similar size bronze jug (no. 16) of a different form were found in Beirut and in Sardis where they were dated to the Byzantine period (Zuheiri 1998–1999:fig. 10; Waldbaum 1983:pl. 34:520, 521). In Jaffa, none of the finds are related to burials. The jugs (nos. 17, 18) appear to be rather rare. Similar but not identical juglets have been found in Tiberias they belong to an early medieval Muslim hoard (Khamis and Amir 1999:pl. 3). The decorated cosmetic bowl (no. 20) stands out in this group. Similar fine-shaped bowls and high quality metal work can be seen among the artifacts from the early medieval hoard found in Tiberias.

The small low stem cup (no. 14), the three bowls of which one (no. 15) is fragmented, the three bronze jugs (nos. 16–18), the lid (no. 19), the fine bronze cosmetic bowl (no. 20), and the mortar are all made in the very same technique: hammered sheets of copper alloys that were shaped to the form of the desired vessel.

The majority of the vessels come from Area A, while only three were unearthed in Area C.

13 Bowl

Reg. No. 79/A/56/057; Area A

H.: 4; Diam.: 19.5; Base diam.: 17

Bronze shallow bowl. Lugged rim. Vertical sides and flat base.

Parallels: Meqabelein, 7th century BCE (Harding 1950:pl. XIV:6); two similar but not identical bowls were found at Corinth, the first dates to the Byzantine period the 2nd the 13th centuries CE (Davidson 1952:pl. 50:551, 543).

14 Low stem cup

Reg. No. 79/A/55/075

Diam. 5.5; H.: 4

Metal extremely thin, the work very fine although simply decorated with three lines under the rim. It is a most elegant piece and may have served for drinking, although the quantity it could hold was fairly small.

Date unknown.

15 Bowl

Reg. No. 79/A/70/045; Area A, Bucket 204

H.: 5.5; Diam.: 30

Found in Hellenistic–Early Roman context.

Fragments of a large shallow bronze bowl. Flat grooved rim. The remains of a semicircular handle can still be seen.

16 Jug

Reg. No. 79/A/56/058; Area A

H.: 9; Diam. 6; Base diam.: 7.8

Bronze. Everted rim, piriform body, flat base, open spout. Lid missing.

Parallels: Sardis, early Byzantine (Waldbaum 1983:pl. 34: 520, 521); Beirut, 5th–7th centuries CE (Zuheiri 1998–1999:fig. 10).

17 Jug

Reg. No. 79/A/70/046; Area A, Sq. K3, Bucket 174

L.: 6; Rim diam.: 4

Bronze. Fragment of a jug's neck and rim. Tall slender neck with a plain ridge and an everted rim.

Found in Hellenistic–Early Roman context.

18 Jug

Reg. No. 79/C/61/218 Area C Locus 428

H.: 13.5; Diam.: 3.7; Base diam.: 4.4

Found in 1st–2nd century CE context.

Bronze. Juglet with cylindrical neck, and round, piriform body.

19 Lid

Reg. No. 79/C/61/221; Area C, Locus 428

H.: 1.3; Diam. 7

Found in 1st–2nd century CE context.

Round bronze lid with a ring attached to the top.

20 Cosmetic bowl

Reg. No. 79/A/56/059; Area A

H.: 5; Diam.: 6

Fine bronze cosmetic bowl with decorated lid.

Decorated with small anchors and floral designs.

Parallels: Tiberias (forthcoming).

21 Mortar

Reg. No. 79/C/61/223; Area C, Locus 410E, Bucket 231

H.: 5.4; Diam.: 2.1; Base diam.: 3.1

Found in Byzantine context.

Bronze mortar (?). Cylindrical body with a wide flat base. *Not illustrated.*

12.2.2. Knives, Blades, and Scissors

The five knife blades (nos. 22–25) and scissors (no. 26) are all badly corroded and partly fragmented. They were probably all used for house chores. It is somewhat unusual to find a bronze tool among domestic blades, as iron seems to have been the metal that smithies often preferred for the making of blades.

22 Blade

Reg. No. 79/A/72/070; Area A, Bucket 43

L.: 6.7; W.: 1.4

Fragment of an iron blade. *Not illustrated.*

23 Blade

Reg. No. 79/A/72/073; Area A, Sq. J101, Bucket 587

L.: 15; W.: 2.2

Found in mixed Hellenistic and Byzantine context.

Iron blade. *Not illustrated.*

24 Blade

Reg. No. 79/A/71/114; Area A, Bucket 742

L.: 15; W.: 2.5

Found in Hellenistic context.

Two fragments of an iron blade, with part of the tang.

25 Blade

Reg. No. 79/A/73/072; Area A, Bucket 454

L.: 15.5; W.: 3.2; Th.: 0.7

Found in Persian (?) context.

Upper half of a broad bronze blade. *Not illustrated.*

26 Scissors

Reg. No. 79/C/61/240; Area C, Bucket 301B

L.: 17

Found in Hellenistic–Early Roman context.

Iron scissors. One handle is missing.

12.2.3. Needles

The small collection of three needles (nos. 27–29) were all found in Area A. They were used for various coarse domestic works such as sewing of rough clothes, sails and possibly leather. The eye is usually fairly large and the needle itself quite thick. They are often made of copper alloys but iron needles can also be found.

27 Needle

Reg. No. 79/A/71/027; Area; A, Bucket 595

L.: 13.1; Th.: 0.4

Found in mixed Hellenistic and Roman context.

Bronze needle.

Nahariya, Persian, or Hellenistic (Ovadia 1993:fig. 6:10, 11, 16). Tel Michal, Persian (Muhly and Muhly 1989:fig. 25.4:67); Sardis, Roman and Early Byzantine (Waldbaum 1983:pl. 17: 231–4).

28 Needle

Reg. No. 79/A/71/028; Area A, Bucket 595

L.: 10.5; Th.: 0.2–3.

Found in mixed Hellenistic and Roman context.

Bronze needle with a broad threading eye.

29 Needle

Reg. No. 79/A/71/029; Area A, Bucket 58

L.: 9.4; Th.: 0.3

Found in mixed Hellenistic and Roman context.

Bronze needle. Damaged threading eye.

12.3. Medical and Cosmetic Instruments

This interesting collection contains various implements: three bronze probes, tweezers, a decorated bronze handle/kohl stick and a mirror. Some cosmetic instruments may have been used for multiple purposes. As there are rather few of them I decided to gather them into one group.

The three spatulae (nos. 30–32) could have served for both surgical and pharmaceutical purposes to grind, mix, and apply ointments and pastes. But they were also widely used by surgeons for a variety of minor and large operations such as eye and ear surgery (Bliques 2003:330, fig. 2:12). The fragmented pair of tweezers (no. 33) could again serve for both cosmetic and small surgical needs. The decorated handle/kohl stick (no. 34) and the mirror (no. 35) can clearly be defined as personal objects.

Surgical tools were fairly simple before the Roman period. Surgery was often performed with household objects or domestic implements such as carpenter tools. From the time of the Early Roman Empire a range of distinctive surgical implements began to surface in archaeological records. Specific instruments were made for surgery. Gradually the surgeon's "tool kit" grew and became varied and more specialized (Jackson

2003:312–321).

This small group of surgical, cosmetic and pharmaceutical implements displays some of the daily common medical practices used during classical times and probably later on in the medieval and pre modern periods.

30 Spatula-probe

Reg. No. 79/A/56/053; Area A, Sq. G5

L.: 7.5; Diam. of spoon: 2

Spatula-probe, a combination which has a small flat spoon and a slightly pointed handle.

Parallels: illustrations of Roman medical implements (Rimon 1997:65, fig. 3; 68, fig. 13; Jackson 1990:fig. 4:9–10).

31 Spatula-probe

Reg. No. 79/A/70/274; Area A, Sq. L3, Bucket 248

L.: 14; Th.: 0.5

Found in late Persian context.

Bronze probe, small square spoon at one edge. The handle ends with a round smooth form. Could have been used as a probe.

Parallels: Mt. Gerizim, Persian or Hellenistic (Magen 2008: 110).

32 Probe

Reg. No. 79/A/73/041; Area A, Sq. J100, Locus 1046, Bucket 467

L.: 15.2

Found in mixed Persian and Hellenistic context.

Long handle ending in a round smooth oval shape. The other edge simply ends in a small flat spoon.

Parallels: Gezer, Hellenistic, found in a grave (Macalister 1912:pl. XCV:5.a).

33 Tweezers

Reg. No. 79/A/70/041; Area A, Sq. K4, Bucket 204

L.: 5.8

Found in Hellenistic context.

Two segments of a fine bronze tweezers, rivet at the top of the handle.

Parallels: Roman (Rimon 1997:68, fig. 13); Samaria, Roman (Crowfoot et al. 1957:fig. 104:1–2); Meiron, 365–750 CE (Meyers et al. 1981:pl. 9.6:10).

34 Handle/kohl stick

Reg. No. 79/A/56/048; Area A, Sq. F6

L.: 12; W.: 4.5

Beautifully decorated leaf shaped bronze handle. Served as a stopper a fancy cosmetic bowl, was screwed on to its opening. Decorated with fine floral designs.

Date: modern (20th century)

Parallels: Southern Golan (Roth 1985:39).

35 Mirror

Reg. No. 79/A/72/044; Area A

Diam.: 10.3

A round bronze hand mirror. Delicate holes pierced around the outer edge, which may have had leather or wooden back attached to it.

Parallels: Achzib, Roman, found among grave goods (Dayagi-Mendels 2002:fig. 4.15:7); Samaria, from a Roman tomb (Crowfoot et al. 1957:fig. 106:3); Sardis, Roman 1st–2nd century CE (Waldbaum 1983:pl. 42: 650).

12.4. Jewelry

Jewelry is mainly associated with women, although men in classical times did adorn themselves with rings, bracelets, and earrings. They tended to wear a few pieces of jewelry that were worn mainly as symbols of status (Croom 2000:71). Women on the other hand completed their dress by adding jewelry. What you wore

depended to a large extent on your social and financial abilities and what the fashion of the day dictated. The majority of the finds are made out of plain copper alloys. The finds in this group include a single plain earring (no. 36), a pair of gold earrings (no. 37), ten finger rings (nos. 38–41; nos. 42–46, not illustrated), a necklace (no. 47), and three bracelets (nos. 48–49; not illustrated, no. 50).

During the Roman period rings were worn on the upper joints of the fingers. At first men wore rings only on the ring finger. Only later they were worn on both the forefinger and the little finger. Women, according to Pliny's *Natural History*, had plain iron rings sent to them as a betrothal ring. But there were no real formal customs as known until modern times in which rings are used universally for weddings and engagements.

Bracelets made out of copper alloy wire were extremely common. Earrings were worn in pierced ears, and the simplest type was that of the loop earrings such as the one presented below (Croom 2000:114–115).

All the ten finger rings are made of copper alloys apart from one that is made of silver. Three rings, a bracelet and the fragmented necklace were found in graves 5 and 7 in Area D. It appears that the grave finds were not offerings to the dead, but were probably their personal belongings left on the body while buried. The rest were found in Area A, four of which were found in Squares I3/I4.

The quality of the work and the material implies it belonged to the lower and middle classes that could not afford expensive metals such as silver and gold.

12.4.1. Earrings

Earrings of this type are fairly common among grave goods dating from the Iron Age to the Byzantine period.

36 Earring

Reg. No. 79/A/74/047; Area A, Bucket 134

Diam.: 1.6.

Plain bronze ring.

Parallels: Achzib, 10th–9th centuries BC, found in a grave (Mazar 2003a:figs. 24:7; 43:10,11); a similar but not identical earring was found in Megiddo, 780–650 BCE (Lamon and Shipton 1939:pl. 86:16); Meiron, 365–750 CE (Meyers et al. 1981:pl. 9.7:18); Kh. Sabiya, Byzantine (Ayalon 1994:fig. 7:21).

37 Pair of gold earrings

Reg. No. 79/T/62/013–14; Area T

L.: 1.8; Diam.: 0.9

Found in Tomb 20 together with a wine glass and glass indented jar. The tomb dates from the Late Roman to the Byzantine period.

The earrings are made of a fine golden wire thread in the shape of a drop or kidney.

Parallels: Similar but not identical bronze earrings were found in Ramat Hanadiv in wishing well of 'Ein Tzur (Kol-Yaakov 2000:pl. XII: 7), and at a Roman burial tomb at Samaria (Crowfoot et al. 1957:fig 100:9).

12.4.2. Bronze Rings

Nine simple plain bronze rings of various sizes are listed below (nos. 38–46). They are fairly numerous, often found among grave goods. They appear in many periods and clearly represent the type of jewelry worn by common people.

Parallels: Megiddo, ca. 780–350 BCE (Lamon and Shipton 1939:pl. 86:4, 17); Achzib, 8th to 7th centuries BCE, found in a grave (Mazar 2003a:figs. 24:7, 43:15); Gezer, found in Hellenistic grave (Macalister 1912:pl. XCV); similar rings were found at Sardis and date from the Hellenistic, Roman, and Early Byzantine periods (Waldbaum 1983:pl. 49: 857, 858, 860); Beth Guvrin, 4th to 8th centuries CE (Dahari, Avni and Kloner 1979: p. 99); Gezer, found in a Byzantine grave (Macalister 1912:pl. LXXXVI).

38 Ring

Reg. No. 79/A/71/084; Area A, Sq. I4, Bucket 15

Diam.: 1.7; Th.: 0.3.

Found in mixed Persian and Byzantine context.

39 Ring

Reg. No. 79/A/71/085; Area A, Sq. I3, Bucket 185

Diam.: 2.0 Th.: 0.3.

Bronze open-end ring.

40 Ring

Reg. No. 79/A/71/086; Area A, Sq. I4, Bucket 96.

Diam.: 3.3; Th.: 0.5.

Bronze open-end ring.

41 Ring

Reg. No. 79/A/73/069; Area A, Sq. G102, Bucket 219

Diam.: 2.2; Th.: 0.2; Width of band: 0.7

Found in mixed context with finds dating to the Roman, Crusader, and Ayyubid periods.

Closed ring. *Not illustrated.*

42 Ring

Reg. No. 79/A/73/046; Area A, Locus 725, Bucket 372

Diam.: 2.7; Width of band: 0.3

Found in a refuse pit that dates to the Late Roman–Byzantine period.

Closed bronze ring.

43 Ring

Reg. No. 79/D/63/048; Area D, Grave 5, Bucket 5

Diam.: 1.7; W.: 0.2.

Closed ring.

44 Incised ring

Reg. No. 79/D/63/049; Area D, Grave 5, Bucket 5

W.: 1.8

Bronze ring with incised circles decorating the band.

45 Ring

Reg. No. 79/D/63/055; Area D, Grave 7, Bucket 11

Diam.: 1.9

Open bronze ring.

46 Silver ring

Reg. No. 79/A/73/042; Area A, Locus 752, Bucket 566

Diam.: 2; Th.: 0.2; Width of band: 0.5.

Found in a refuse pit that dates to the Late Roman–Byzantine period.

Closed silver ring. With a rectangular decoration, or possibly part of a necklace.

Parallels: Sardis (Waldbaum 1983:pl. 49:870)

12.4.3. Necklace

47 Necklace

Reg. No. 79/D/63/054; Area D, Grave 7, Bucket 11

Diam.: 11.5 Th.: 0.3

Made of two coiled bronze wires, with small loops to close it.

12.4.4. Bracelets

Three open bracelets made of copper alloy bands, only one with incised marks, while the rest are without decorations. One seems to have belonged to a child as the diameter indicates a rather small wrist measuring 4.7 cm, and was found in a grave together with two bronze rings.

48 Bracelet

Reg. No. 79/A/73/048; Area A, Locus 108

Th.: 0.2; Diam.: 6

Found in mixed Hellenistic and Byzantine context.

Bronze bracelet with incised markings.

Parallels: Corinth, Byzantine (Davidson 1952:pl. 112:2133, 2134).

49 Bracelet

Reg. No. 9/A/70/039; Area A, Sq. J3, Bucket 45

Diam.: 7.6; Th.: 0.7

Found in mixed Persian and Byzantine context.

Plain open bronze bracelet. *Not illustrated.*

50 Bracelet

Reg. No. 79/D/63/050; Area D, Grave 5, Bucket 5

Diam.: 4.7; Th.: 0.6.

Open bronze bracelet, edge rounded.

12.4.5. Medallion (?)

51 Iron cross

Reg. No. 79/C/61/243; Area C Locus 428, Bucket 576

L.: 4.3; W.: 3.1.

Found in 1st–2nd century CE context.

Flat iron cross. Slightly bent at the top. May have been used as a medallion.

(not illustrated).

12.4.6. Key Rings

Two bronze key rings (nos. 52 and 53). The key attached directly to the ring band at a right angle. Similar key rings were found in Corinth and were dated to the Roman and Late Roman period or later.

Parallels: Shiqmona, Byzantine (Elgavish 1994:fig. 102); Meiron, ca. 365–750 CE (Meyers et al. 1981:pl. 9.4:6); Corinth, 4th–7th centuries CE (Davidson 1952:pl. 70, figs. 976–7).

52 Key ring

Reg. No. 79/A/73/043; Area A, Locus 752, Bucket 654

Diam.: 2; Th.: 0.2; Band W.: 0.7

Decorated on the front side with two medallions, each with a tiny cross incised in the center.

Found in a refuse pit that dates to the Late Roman–Byzantine period.

53 Key ring

Reg. No. 79/A/73/044; Area A, Locus 752, Bucket 587

Diam.: 2; Th.: 0.2; Band W.: 0.6

Found in a refuse pit that dates to the Late Roman–Byzantine period.

12.5. Clothes-Fastening Pins

Fibulae

The most typical clothes-fastening device of the Iron Age up to the Roman period was the bronze bow brooch-fibula. The advantages of the safety pin are fairly obvious since it is less likely to get lost or to injure the person wearing it. On the whole it was prone to quite considerable strain and must have been replaced fairly often. Fibulae with a hinge were known in pre-Roman times but they only became popular during the Roman period (Johns 1996:155). During the 8th century BCE the fibula came into fashion in Syria and Palestine, appearing in a variety of new forms. The new types from Syro-Palestine are remarkable in their designs and

the quality of their manufacture (Stronach 1959:181). The more angular “elbow” types continued throughout the Hellenistic period in smaller numbers before they disappeared and gave way to the new Roman types that arrived in the 1st century CE. Stern seems to have arrived at a very similar conclusion. According to him they were common in Palestine during the Persian and Hellenistic periods, although this type seems to have slowly gone out of fashion during the latter period (Stern 1973:152, fig. 257).

The six bronze fibulae found in Jaffa are mostly fragmented, belonging to the “knee” also known as “elbow” and triangular fibulae (nos. 54–59). They appear to be the most popular type in the Near East. Their geographical distribution extends from Egypt to Persia, and as far as their dating is concerned they cover an extremely long period running from the 8th century BCE to the 1st century CE. Although most of them are made of bronze, in some of those found in northern Syria and Palestine the pin is made of iron. After the fall of the Assyrian Empire this type seems to have remained a standard form from western Persia to Palestine until the end of the Achaemenid period (Stronach 1959:193–4).

54 Fibula

Reg. No. 79/A/72/049; Area A, Bucket 380

L.: 12

Large thick bronze fibula with incised decorations; perforated rounded top for pin with a catch plate in the form of a human hand to keep the pin in place. May have been imported from Greece. Most were made in a cast.

Parallels: Tel Megadim and Hazor, Persian period (Stern 1973:fig. 227); Tel-Michal, 5th century BCE (Muhly and Muhly 1989:fig. 25:13:244, 246, 247); Gezer, Hellenistic (Macalister 1912:pl. CXXXIV:3); Yoqne'am, early Byzantine (Khamis 1996: 232, ph. XVIII.40, no.73); Ramat Hanadiv (Kol-Yaakov 2000:pl. XII: 1–2).

55 Fibula

Reg. No. 79/A/72/048; Area A, Bucket 99

L.: 5

Fragment of a bronze fibula with raised decoration applied on the band.

Found in mixed Late Persian and Early Roman context.

Parallels: Tel Nahariya, Persian (Ovadia 1993:fig. 6:7, 8); Samaria, Hellenistic (Crowfoot et al. 1957:fig. 102: 4, 5).

56 Fibula

Reg. No. 79/A/71/094; Area A, Sq. J2, Bucket 416

L.: 5.6; Th.: 0.5

Fragment of bronze fibula.

Found in mixed Hellenistic and Roman context.

Parallels: Tell el-Hesi, Persian (Bennett and Blakely 1989:fig. 215:1, 2, 5); Tel 'Ira, Hellenistic (Goldsmith 1999:fig. 14.15: 8).

57 Fibula

Reg. No. 79/A/71/095; Area A, Sq. I3, Bucket 165

L.: 4.5; Th.: 0.6

Fragment of bronze fibula.

Found in mixed Persian and Hellenistic context.

58 Fibula

Reg. No. 79/A/70/042; Area A, Sq. K3, Locus 120

L.: 5.6; W.: 0.2–1.2

Two segments of a bronze cross fibula.

This type was probably brought into Palestine by the Roman legionnaires and was among the most common in the 3rd to 4th centuries CE (Meyers et al. 1996:231).

Parallels: Samaria, Roman (Crowfoot et al. 1957:449, fig. 108); Sepphoris, 3rd to 5th centuries CE (Meyers et al. 1996:231: 135, 136).

59 Fibula

Reg. No. 79/C/61/237; Area A, Locus 429, Bucket 614

W.: 2.7; Th.: 0.7

Bronze, slightly rounded.

Parallels: Megiddo, ca. 780–650 BCE (Lamon and Shipton 1939:pl. 85:16).

Toggle Pins

Toggle pins (no. 60) were used as a garment pin to fasten together both edges of the cloth. A string was attached to the eyelet and was coiled around that section of the pin which was covered by the cloth. The other end of the string need not be fastened at all; if a simple loop is passed through the head of the pin the fastening will never open and will close the dress tightly. In Palestine, toggle pins were replaced by fibulae in the early Iron Age period (Henschel-Simon 1938:171–172).

60 Toggle-pin

Reg. No. 79/C/61/230; Area C

L.: 9.2; Th.: 0.6

Decorated bronze toggle-pin.

Parallels: Jericho, Middle Bronze, tomb (Kenyon 1965:fig. 245:4); Beit Sahur, found in tombs dating to Iron Age I, Cave VIII/28 (Ladzhinskaya 2002:fig. 1:1–2); Tell el-'Ajjul, XXV Dynasty, ca. 712–664 BCE (Petrie 1933:pl. XXIV:171).

Straight Pins

The next four pins are in fact straight pins that represent one of the earliest types of dress fastening gadgets (nos. 61–64). They stretch over a considerable period of time. Similar pins were found at: Megiddo, ca. 1050–1000 BCE (Lamon and Shipton, 1939:pl. 84:12, 13); Achzib, 9th–7th centuries BCE found in a grave (Mazar, 2003a:57:5); Tel Michal (Muhly and Muhly 1989:fig. 25.13:274), and Sardis where they date to the 8th century BCE and to the Late Roman period (Waldbaum 1983:pl. 41:660, 661, 662); Megiddo (Paice 2004:pl. 27:20–21).

61 Straight pin

Reg. No. 79/A/74/041; Area A, Locus 1241, Bucket 184

L.: 4.5

Bronze, slightly curved at the head in order to create the eye.

62 Straight pin

Reg. No. 79/C/61/232; Area C, Bucket 714

L.: 6.4; Th.: 0.2

Found in mixed Persian and Hellenistic context.

Crude bronze pin; the eye is formed by simply bending the head.

63 Straight pin

Reg. No. 79/A/71/032; Area A, Sq. I4, Bucket 15

L.: 9.2; W.: 0.4

Found in mixed context.

Bronze pin. Head resembles that of a serpent. Roll-headed type.

64 Straight pin

Reg. No. 79/A/71/033; Area A, Bucket 751

L.: 8.5; Diam. of head: 0.4.

Bronze pin.

12.6. Bronze Figurines (?)

The two fragments of animal paws (nos. 65 and 66) are either remains of figurines or may have served as legs for delicate furniture and various artifacts such as lampstands and hearths. The closest match I have come across was from a complete copper hearth that stands upon decorative delicate animal legs, and a lamp-

stand with the same features. Both artifacts date to the Byzantine period. But it would be wrong to draw any conclusions as to the dating of those fragments according to the parallels.

65 Animal figurine(?)

Reg. No. 79/C/61/224; Area C, Bucket 670

L.: 7; W.: 2.5; Th.: 2.5

Segment of a bronze animal figurine. A rather delicate broad paw of a wild cat (leopard?) with four nails.

Parallels: Jerusalem, Byzantine (Mazar 2003b:pl. I.9:5).

66 Animal figurine(?)

Reg. No. 79/C/61/225; Area C, Bucket 304

H.: 1.4; W.: 2.5

Segment of a bronze animal figurine. A broad paw of a wild cat (leopard?) with four nails.

Parallels: Sardis, Byzantine, on a lamp-stand (Crawford 1990:fig. 182, 584).

The Dolphin

The copper alloy dolphin appliqué (no. 67) was found on a plastered floor together with two complete Late Hellenistic lamps. The first is a folded lamp (no. 8.1090) and the second is a Delphini form lamp (no. 8.1122).

Due to their happy nature and physical elegance dolphins were woven into various aspects of Greek culture. Dolphins figure in Greek mythology and poetry, and appear frequently in various forms of art as well as on coinage. Although the Greeks were aware of the fact that the dolphin is a mammal, it was made lord of the sea and the king of the fish. Dolphins were known as weather prophets and the safe keepers of fishermen. They were also connected with weaponry, and warriors often depicted them on shields. Later, in Roman times, they were depicted on sarcophagi since according to legend the dolphin was the symbol of Nereids (sea nymphs) who conveyed the souls of warriors to the next world.

It was believed that when dolphins are about to die they will come ashore to be buried. Although it was considered against the law to hunt and kill these animals, men found various uses for their teeth, fat and liver, believing they were able to cure certain diseases (Ridgway 1970:86–95). The small bronze dolphin found in Jaffa probably decorated a wooden box or possibly fine furniture.

67 Dolphin appliqué

Reg. No. 79/Y/64/134; Area Y, Locus 600, Bucket 16

L.: 5.5; W.: 1.5

Elongated mouth, with a soft eye and a somewhat sad look; two fins and a high raised tail. Made in a mold with a flat surface in the back.

Parallels: A similar dolphin is displayed in the Maritime Museum in Haifa and is said to have come from Caesarea (Flusser 1967–8:pl. X: 29).

12.7. Lead Mask

The lead mask (no. 68) is one of the most interesting artifacts among the metal objects found by Kaplan. Very few such objects are published or exhibited in museums. It is a cast lead mask with features of a human face; a protruding chin and big hat or hairstyle with a central parting. The mask is slightly chipped and part of the right section is missing. Several clay masks were found in Dor, they all have rather grotesque looking features and date to the Persian period (Stern 2000:175, fig. 107–108). An ivory mask with similar features was found in a 10th–8th century BCE tomb in Achzib in the Southern Cemetery (Mazar 2003a:fig. 18:4). A similar bronze mask from Samaria was dated to the Roman period, on which the face depicted is a satyr. According to Stern those masks belong to a popular ritual in which they were displayed or worn to ward off the evil spirits and the forces of darkness, especially from children (Stern 2000:174–181).

In many Phoenician settlements clay masks of apotropaic significance were hung on walls and laid in tombs. Masks of various sizes, some with grotesque features and others with smiles and happy appearances, depicting men and women, devils and certain goddesses such as Bes are known from sites that formed part

of the Phoenician world. Moscati, like Stern, claims they had a protective function. Masks of different types were found in Sardinia, Sicily and Ibiza where they were dated to the 7th–6th centuries BCE (Moscati 1968:164, 168).

68 Lead mask

Reg. No. 79/A/73/062; Area A, Sq. I101, Bucket 178

L.: 4.3; W.: 3.5

Found in mixed Hellenistic–Byzantine context.

Parallels: Achzib, 10th–9th century BCE, found in a burial cave (Mazar 1996:170; 2003a:fig. 18:4); Samaria, Roman (Crowfoot et al. 1957:449, fig.108: 2).

12.8. Bell

Bells of this size (no. 69) were tied round sheep and other animals' necks. Although they were usually not cast in bronze. Cast bells of this type and size were found in sanctuaries, burials, and domestic contexts. They were known as votive offerings given to Athena in celebration of military and athletic champions (Villing 2002:275–276). They were often used to signal or attract the attention of crowds. In Roman times, the opening of markets or a bathhouse was announced with a bell, while in one's private quarters bells were used to awaken and to summon slaves. In both the Greek and Byzantine armies the officer in charge of the guards would ring a bell to check whether the guard was asleep or awake (Villing 2002:278). Bells were often used in rituals that included dancing such as those performed in the cult of Dionysus (Villing 2002:285). But it seems that their most common use in daily life was during funerals to ward off evil powers. They are also found in graves of the Archaic, Classical, and later periods. They often appear in children's graves, and this custom seems to cover a vast geographical area ranging across the Caucasus, Cyprus, the Black Sea, Iberia, Hellenistic Egypt, and Syria (Villing 2002:289–291).

69 Bell

Reg. No. 79/A/74/052; Area A, Bucket 152

H.: 7.5; Diam.: 4–5

Cast bronze bell. A long hollow tube served as a clapper. Ring at the top for hanging.

Parallels: Found in a grave at Sajur, 2nd–3rd century CE (Braun et al. 1994:fig. 5:5); Sepphoris, 4th–5th century CE (Meyers et al. 1996: fig. 124); Ḥorvat Ḥermeshit, Byzantine–Early Islamic (Iron-Lubin 1995:fig. 105:4); Tarshiha, found in a tomb, Roman (Ilfie 1934:pl. 7:13); el-Jish, found in a tomb, Roman (Makhouly 1938–9:pl. 31:14).

12.9. Buckles

Buckles could have served for both clothing and a variety of straps and fittings used for harnessing horses and other animals of burden.

The seven buckles displayed in this group (nos. 70–76) are all made of bronze, and the majority are rather plain with no decorations of any kind. The two main types are those designed in the shape of a horseshoe and ring-shaped buckles of various sizes.

70 Buckle

Reg. No. 79/A/72/065; Area A, Bucket 35

D. 3.2

Found in mixed Hellenistic and Early Roman context.

Horseshoe shaped iron buckle.

71 Buckle

Reg. No. 79/A/70/037; Area A, Sq. L–3, Bucket 361

L.: 3.5; W.: 3.5

Found in mixed Hellenistic and Early Roman context.

Horseshoe shaped iron buckle.

Parallels: Upper Zohar Fort, Byzantine (Harper 1995:fig. 25:20).

72 Buckle

Reg. No. 79/A/74/046; Area A, Bucket 134

L.: 2.5; W.: 2

Horseshoe shaped bronze buckle.

Parallels: 'Atlit, 13th century (Brosh 1999:232, fig. 3).

73 Buckle

Reg. No. 79/A/71/097; Area A, Sq. I1, Bucket 550

L.: 2.8; W.: 1.8; Th.: 0.1–0.8

Found in mixed Byzantine and Early Islamic context.

Bronze ring-shaped buckle.

74 Buckle

Reg. No. 79/A/73/051; Area A, Sq. J101, Bucket 223

Diam.: 1.4

Found in mixed Persian and Hellenistic context.

Fine ring-shaped buckle.

75 Buckle

Reg. No. 79/Y/64/103; Area Y, Bucket 6

L.: 4.4; W.: 3.3; Th.: 0.5.

Found in late Persian context (5th century BCE).

Bronze buckle flat leaf-shaped with a rivet in the center. *Not illustrated.*

76 Buckle

Reg. No. 79/D/63/065; Area D, Bucket 36

H.: 2.4; W.: 3.4

Bronze semicircular buckle.

Parallels: 'Atlit, 13th century CE (Brosh 1999:232, fig. 3).

12.10. Weights

The eight weights that comprise this group can be divided into three main categories according to their shape:

- 1) Flat, rectangular lead and bronze weights (nos. 77–80).
- 2) Rectangular lead weights inscribed with a letter or an inscription (nos. 81–82).
- 3) Round and conical-shaped weights (nos. 83–84).

In general most of the weights in this group seem to have been used for weighing coins as well as fine goods, such as precious metals, precious and semi-precious stones, and spices that were, during certain periods, as expensive as gold and silver.

In the Hellenistic period, market weights used for daily commerce were usually made of lead (Kisch 1965:148). Flat, square bronze weights were common in the Roman and Byzantine periods; their weight was according to the Roman system in which the pound (327.5 gr) was divided into 12 unciae (27.3 gr) and the uncia was divided once again into 24 resulting in the smallest unit which was a scruple (1.137 gr). This system underwent various changes, the most important being that of Constantine in 307 CE in which a new weight was introduced, the nomisma (4.55 gr).

Although lead weights did not go out of use, they became quite rare (Davidson 1952:205) during the Roman and Byzantine periods. Bronze weights are more typical of lower denominations (Qedar 2005:23–5), and they remained in use throughout the Byzantine period and later into the Early Islamic period.

12.10.1. Flat, Rectangular Lead and Bronze Weights

77 Bronze weight

Reg. No. 79/A/72/053; Area A, Sq. J101, Bucket 546

H.: 1.5; W.: 1.4; Th.: 0.4; Wgt.: 8.2 gr

Found in mixed Hellenistic and Roman context.

Square, with flat and smooth upper surface, while the other side has a series of small indentations that form the letter B= (2) nomisma weight.

Parallels: Corinth, 4th century CE (Davidson 1952:pl. 94:1590, 1593); Shiqmona, Byzantine (Elgavish 1994:fig. 108); Yoqne'am, Byzantine (Khamis: 1996:232, fig. XVIII.9:2).

Note: Bronze weights inscribed in Greek appeared in Palestine in the Byzantine period. Inscriptions on these weights usually indicated the basic weight unit and the number of such units. However, small weights often carry only the number, as in the present case. The weight (mass) of our item comes closest to the mass of two nomismata.

78 Lead weight

Reg. No. 79/A/72/054; Area A, Locus 706, Bucket 40

L.: 3.1; W.: 3.3; Th.: 0.9; Wgt.: 100.4 gr

Square lead weight, one side is smooth and the other incised with the Greek letter "delta" that stands for 4. Probably that of 4 unciae, approx. 109 gr

Note: The number 4 could mean either "four" or "a fourth". As the scratch appears posterior to the manufacture of the weight itself, it is likely that, at a later point of time, the mass of the item was equated to a number of basic units that were current at this time. Since the weight mass approximates that of four ounces, this may well have been the meaning of the sign. There is no evidence for the use of the Roman weight system (which involved division into ounces) in Palestine before the 2nd century CE. This use continued until the end of the Byzantine period.

79 Lead weight

Reg. No. 79/X/60/033; Sounding X

L.: 2.5; W.: 2.5; Th.: 0.7; Wgt.: 39.94 gr

Square lead weight.

Parallels: Beth-Shean, Byzantine–Umayyad (Khamis 1998:64).

80 Lead weight

Reg. No. 79/A/73/058; Area A, Sq. I100, Locus 1041, Bucket 400

L.: 7; W.: 5.2; Th.: 1.2; Wgt.: 357 gr

Found in mixed Persian and Roman context.

Lead rectangular weight, with two recesses on the sides and rectangular hole in the center.

81 Lead weight

Reg. No. 79/X/60/020; Sounding X, Bucket 35

L.: 4.8; W.: 4.8; Th.: 1.45; Wgt.: 270.9 gr

Square lead weight. The letter "K" is incised in the center in a square frame.

82 Lead weight

Reg. No. 79/X/60/021; Sounding X, Bucket 35

H.: 4.7; W.: 3.8; Th.: 0.9; Wgt.: 132.7 gr

Rectangular lead weight with Greek inscription.

Parallels: Underwater survey at 'Atlit (Kushnir-Stein 2011:47, B7).

Note: Several Hellenistic weights decorated with a galley (or the prow of a galley) are known from the Phoenician-Palestinian coast. On all these weights, there is a date above the galley. On the Akko-Ptolemais (IAA 1971–987) there is also an abbreviated name under the galley. Thus, one may interpret the letters above the galley on our item as a date, and the letters below as representing the name of an official (agoranomos?) responsible for the weight's manufacture.

The mass of the item would correspond to a quarter of the Seleucid mina (ca. 550 gr). The date KP (120) counted from the Seleucid era of 312 BCE gives 193/2 BCE. This is the earliest date known so far from Palestine. The question is, however, whether the weight was of local manufacture. Known Hellenistic weights from Palestine have the date invariably introduced by the sign "L" (Kushnir-Stein 2011:52). There is a possibility that the sign on our item either became worn, or happened to be off flan. But if the L-sign was not initially intended, the origin of the weight in a locality situated on the Phoenician coast north of the river Eleutherus cannot be ruled out.

12.10.2. Round and Conical Bronze Weights

This type of weight is also known as dome weight. Similar shaped weights but with slightly smaller dimensions were found in Tel Taanach and date to the Iron Age, although they are made of bronze (Frick 2000:160–162).

83 Lead weight

Reg. No. 79/A/72/055; Area A, Sq. K3/J3, Bucket 11

H.: 1.8; Base diam: 1.1; Wgt.: 42 gr

Conical with a flat base.

84 Bronze weight

Reg. No. 79/Y/68/343; Area Y, Sq. Z14, Locus 29, Bucket 183

Diam.: 2.2; Wgt.: 40 gr

Round flat base; the weight equals 4 shekels.

Parallels: Tel Taanach, Iron Age, ca. 1150–1125 BCE (Frick 2000:162, TT711–TT712).

12.11. Weapons

12.11.1. Winged Arrowheads

Triple-winged bronze arrowheads (nos. 85–90, 92), are well known from Persian and Hellenistic sites. Although bronze is the dominant material, some were made of iron; the latter were found in both Lachish and Mt. Gerizim. Iron arrowheads of this type are rare.

The triple-winged arrowheads belong to the Iranian-Scythian type. Their introduction to the battlefields of the Achaemenid Empire is assigned to the Scythian invasion in the 7th century BCE. At Tel Michal this type of arrowhead was found to contain a large amount of lead, 11 to 30%. Adding a small amount of lead aided in the casting of the complex shape of this type of arrowhead, in addition it also increased its weight (Muhly and Muhly 1989:271).

Their length runs from 2.5 to 5.5 cm. The wings are thin and slender. The arrowhead is fastened to the shaft via a tube-shaped socket. The edge is sharp and pointed.

Parallels: Tel Megadim (Stern 1973:154–7); Sardis (Waldbaum 1983:pl. 4, fig. 47; Ramat Hanadiv (Kol-Yaakov 2000:pl. XI:8–9); Tell el-Hesi, 4th–6th century BCE (Bennett and Blakely 1989:fig. 215:8–12); Tel Michal (Muhly and Muhly 1989:fig. 25.1:13–17); Lachish (Tufnell 1953:pl. 60:13, made of iron); Gezer (Macalister 1912:pl. CCXV:12, 59); Tel 'Ira (Goldsmith 1999:fig. 14.14:3, 4); Mt. Gerizim, Hellenistic (Magen 2008:218, fig. 295).

85 Winged arrowhead

Reg. No. 79/A/71/077; Area A

L.: 3.7; W.: 0.8; Diam. of socket: 0.4

Bronze

86 Winged arrowhead

Reg. No. 79/A/71/078; Area A, Bucket 589

L.: 3.5; W.: 0.8; Diam. of socket: 0.4

Bronze

87 Winged arrowhead

Reg. No. 79A/71/079; Area A, Sq. I2, Bucket 250

L.: 3.4; W.: 0.8; Diam. of socket: 0.5

Bronze

88 Winged arrowhead

Reg. No. 79/A/71/080; Area A, Bucket 184

L.: 5.5; W.: 0.8; Diam. of socket: 0.4

Bronze

- 89 Winged arrowhead
Reg. No. 79/A/71/081; Area A, Sq. J2, Bucket 577
L.: 2.5; W.: 0.7; Diam. of socket: 0.3
Bronze
- 90 Winged arrowhead
Reg. No. 79/A/71/082; Area A, Sq. I–3, Bucket 211
L.: 3; W.: 0.8
Bronze
- 91 Winged arrowhead
Reg. No. 79/A/70/040 Area A, Sq. K4, Bucket 220
L.: 4; W.: 0.7; Diam. of socket: 0.5
Bronze. Tiny, whole at the junction of the socket and the body of the arrowhead. *Not illustrated.*
- 92 Winged arrowhead
Reg. No. 79/A/74/044 Area A, Bucket 99
L.: 1.6
Bronze. Tiny, whole at the socket.
- 93 Winged arrowhead
Reg. No. 79/A/73/037; Area A, Sq. J100, Bucket 532
L.: 3.2; W.: 1
Bronze. *Not illustrated.*

12.11.2. Barbed Arrowheads

Barbed, tanged arrows; the arrowhead is flat and triangular-shaped with a narrow ridge along the center. The tangs are long. Arrows of this type were found in well dated Hellenistic levels.

Parallels: Dor (Stern 1992:108, fig. 144); Samaria (Crowfoot et al. 1957:fig.110:16–20); Mount Gerizim (Magen 2008:vol. 2, fig. 295); Akko (Dothan 1976:73), and Sardis (Waldbaum 1983:pl. 4, fig. 47).

- 94 Barbed arrowhead
Reg. No. 79/C/65/528; Area C, Bucket 952
L.: 3.7; Length of tang: 2.5; W.: 1.5.
Bronze. *Not illustrated.*
- 95 Barbed arrowhead
Reg. No. 79/A/73/034; Area A, Sq. I101, Bucket 205
L.: 3.7; W.: 1.4; Th.: 0.3
Bronze.
- 96 Barbed arrowhead
Reg. No. 79/A/73/035; Area A, Bucket 222
L.: 4.3; W.: 1.7; Th.: 0.4–0.6
Bronze. Similar to the one described above. Ending with two barbs, vague line defining the midrib.
Parallels: Corinth, (Davidson 1952:pl. 91, fig. 1512).

12.11.3. Pyramidal Arrowheads

The pyramidal-shaped arrowheads are all made of iron. Their shape and material probably derive from the development in armor. In order to pierce and penetrate heavier and thicker suits of armor, arrowheads were made of harder metal and were sharp and narrow. Several arrows of this type were found in Jaffa in different contexts dating from the Iron Age, Persian, Hellenistic, Early Islamic, and Medieval periods. The examples below are of arrowheads that were in a relatively good state of preservation. The length of the pyramidal arrowheads found in Jaffa ranges between 4 and 6 cm. Their cross-section is square or triangular. They have a long, thin tang that run deep into the wooden shaft (nos. 98–100).

Parallels: Similar but not identical arrows were found in Iron Age Lachish (Gottlieb 2004:fig. 27:17); Roman refuge caves in the Judean Desert (Porat et al. 2009:fig. 17, pl. 4:7); 12th–13th centuries CE, Arsuf

and Vadum Iacob (Raphael 2008:fig. 2; Raphael and Tepper 2005:fig.1). The appearance of this type at Persian and Hellenistic levels is almost unknown and no similar parallels could be identified.

97 Pyramidal, tanged iron arrowhead

Reg. No. 79/A/72/076; Area A, Sq. J101, Bucket 584

L.: 5.5

Found in Persian–Hellenistic context. *Not illustrated.*

98 Pyramidal, tanged iron arrowhead

Reg. No. 79/A/71/116; Area A, Bucket 623

L.: 9.4; Th.: 0.6

Found in Hellenistic context.

99 Pyramidal, tanged iron arrowhead

Reg. No. 79/A/74/056; Area A, Bucket 80

L.: 4.8; W.: 1.2

Tang and point slightly chipped and damaged.

Found in Early Islamic context.

100 Pyramidal tanged iron arrowhead

Reg. No. 79/A/73/070; Area A, Sq. 100, Bucket 332

L.: 6.2; W.: 1

Found in Ayyubid–Crusader context.

12.11.4. Leaf-shaped Arrowheads

Flat, leaf-shaped, tanged iron arrowheads are less suitable in combat against well-armed infantry and cavalry. They are not capable of penetrating scale or plate armor, helmets or shields. It seems that archers using these arrows targeted horses, which were seldom protected in this region, or men who were poorly or only partially covered in armor (nos. 101–105). Only two of the arrows originate from clear contexts.

101 Flat leaf-shaped iron arrowhead

Reg. No. 79/A/72/077; Area A, Bucket 241

L.: 5.2; W.: 2.2

Section: Elliptical section. Fitted into the shaft with a tang. Slightly cracked, badly corroded.

102 Flat leaf-shaped iron arrowhead

Reg. No. 79/H/64/031; Area H

L.: 8.3; W.: 1.8

Elliptical section. Fitted into the shaft with a tang.

103 Flat leaf-shaped iron arrowhead

Reg. No. 79/A/56/049; Area A

L.: 9.9; W.: 1.5

Flat, leaf-shaped iron arrowhead. Fitted to the shaft with a tang. Broken into 3 segments. Found in an Iron Age context.

Parallels: Lachish (Gottlieb 2004:fig. 27.2: 9–10)

104 Flat bronze arrowhead

Reg. No. 79/A/71/075; Area A, Bucket 83

Flat bronze arrowhead. Tanged. Sharp and pointed.

L.: 3.2; W.: 1, Th.: 0.2

105 Flat kite-shaped bronze arrowhead

Reg. No. 79/A/71/076; Area A, Sq. I4/H4, Bucket 604

L.: 4.8; W.: 1.2 Th.: 0.3

Flat kite-shaped bronze arrowhead. Tanged.

Found in Persian–Hellenistic context.

106 Bronze arrowhead

Reg. No. 79/Y/62/030; Area Y

L.: 3.2; W.: 1

Bronze arrowhead, triangular in section, tang and point missing.

12.11.5. Conical Arrowhead

Conical hollow arrowheads are fairly rare (no. 107). While Davidson defined them as spearheads (Davidson 1952:199), Nicolle is rather convinced that they were shot out of crossbows and were simply used as armor piercing bolts (Nicolle 1988:854, 1119 H). In a fifteenth century Muslim war manual specializing in archery there is a good description of a similar arrowhead: “The simple cap like arrowheads are like spearheads, with all their variations, and have hollow bases into which the shafts are inserted, just like a spear” (Faris and Elmer 1945:109).

Parallels: Montfort Crusader castle (Bashford 1927:fig. 53); Corinth (Davidson 1952:pl. 92: 1536–8).

107 Conical arrowhead

Reg. No. 79/X/60/037; Sounding X

L.: 7.8; Diam.: 1.2.

Hollow arrowhead. Conical shape, made out of a bronze plate that was hammered around the shaft(?).

12.11.6. Scabbard(?)

108 Scabbard

Reg. No. 79/A/71/115; Area A, Sq. H3, Bucket 44

L.: 9.3

Fragment of an iron scabbard, upper section missing.

12.12. Hooks, Rings, and Fittings

This group displays a variety of iron and bronze fittings that could be used in domestic abodes and courtyards.

109 Frog

Reg. No. 79/A/73/050; Area A, Sq. J100, Bucket 667

L.: 3.1

Bronze “frog,” triangular shaped with a round disk. Used in the Roman army to attach a scabbard to the belt. The frog was fastened to the belt through a slit in the leather.

Parallels: Masada (Stiebel 2007:vol. 1:127, pl. 15: 116 and vol. 3:131–2).

110 Suspension hook

Reg. No. 79/A/72/062; Area A, Locus 747, Bucket 399

L.: 9.2

Iron.

111 Hook

Reg. No. 79/A/71/091; Area A, Sq. H4, Bucket 10

L.: 9, Th.: 0.4

Found in mixed Late Persian and Hellenistic context.

Used to fasten marble plates to the interior of walls (pl. 15:110).

112 Hook

Reg. No. 79/C/61/239; Area C, Bucket 614

Bronze. Found in Hellenistic context.

113 Hinge

Reg. No. 79/A/71/104; Area A, Sq. H3, Bucket 76

L.: 3.5; W.: 3.4; Th.: 0.3

Decorated bronze hinge. Leaf-shaped with copper color coating.

114 Hinge

Reg. No. 79/A/74/045; Locus 1207, Bucket 85

L.: 7.5; W.: 1

Bronze door hinge nails can still be seen where the hinge was once attached to the door. *Not illustrated.*

115 Doorknob

Reg. No. 79/A/71/109; Area A, Bucket 753

W.: 2; Diam.: 4.5

Bronze. Upper part rounded. *Not illustrated.*

116 Door handle(?)

Reg. No. 79/C/61/217; Area C, Locus 432, Bucket 628

L.: 12, Rod thickness: 1.3; Diam. of circular clasp: 5.2

Lead. Cylindrical rod with two circular clasps.

12.13. Nails

Approximately 36% of the metal finds from the excavations in Jaffa are nails, which is not unusual. They can be divided roughly into two main groups: those made of bronze and those made of iron, and sub-divided into nails and tacks. It seems that the vast majority of the nails are made of bronze (nos. 119, 122, 123, 124). Craftsmen may have preferred to use bronze because it was more durable against the corrosion of the salt and humidity of the sea.

Shape and form: In general the shank of the nail is square in section. The head is either round and flat or round and slightly caped.

Table of Bronze Nails

Catalog No.	Excavation No.	Size and Description	Material
117	79/A/72/025; Area A; <i>Not illustrated.</i>	L.: 6; Diam. of head: 1.7; flat round head	Bronze
118	79/A/72/035; Area A, Bucket 472; <i>Not illustrated.</i>	L.: 1.5; Diam. of head: 0.5; flat round head; possibly from sole of a sandal	Bronze
119	79/A/71/063; Area A, Sq. J2, Bucket 398; Found in mixed Persian and Roman context.	L.: 2.1; Diam. of head: 0.8	Bronze
120	79/A/72/036; Area A, Locus 744, Bucket 354; Found in mixed Persian and Roman context. <i>Not illustrated.</i>	L.: 1.7; Diam. of head: 0.3; flat, round head	Bronze
121	79/A/72/115; Area A; <i>Not illustrated.</i>	L.: 8.5; Diam. of head: 2.8; round disc head	Bronze
122	79/A/71/043; Area A, Bucket 721	Length 14.8; Diam. of head: 1.5; round disc head	Bronze
123	79/A/71/048; Area A, Sq. I4/I3, Bucket 309; Found in Hellenistic context.	L.: 13.5; Diam. of head: 2.2; round disc head	Bronze
124	79/A/71/052; Area A, Sq. I2, Bucket 289	L.: 7.4; Diam. of head: 1; rectangular, flat head	Bronze

12.14. Tacks

The tacks are all made of bronze. Their length ranges between 2 to 2.4 cm, while the head diameter is between 1.5 to 1.6 cm. They all have a round, flat head that is extremely large in comparison to the length (nos. 125–128). They seem to have been used for finer attaching leather to furniture, in saddles and possibly foot ware.

Table of Tacks

Catalog No.	Excavation No.	Size and Description	Material
125	79/A/71/061; Area A, Sq. I3, Bucket 48	L.: 2.2; Diam. of head 1.6; Wide round head	Bronze
126	79/A/71/062; Area A, Sq. I4, Bucket 60	L.: 2.4; Diam. of head 1.6; Wide round disc shaped head	Bronze
127	79/A/74/049; Area A, Bucket 129	L.: 2.5; Diam. of head: 1.5; round flat slightly chipped head	Bronze
128	79/A/73/033; Area A, Sq. J100, Bucket 310. Found in mixed Roman, Crusader and Ayyubid context.	L.: 2; Diam. of head: 1.6; dome-shaped head	Bronze

12.15. Miscellaneous

129 Reg. No. 79/A/72/037; Area A

L.: 21

Long tapering bronze rod. *Not illustrated.*

130 Reg. No. 79/A/72/051; Area A, Locus 754, Bucket 530

H.: 2.7; Upper diam.: 1.8; Lower diam.: 1.4

Concave perforated knob, bronze. *Not illustrated.*

131 Reg. No. 79/A/72/063; Area A, Locus 748, Bucket 406

Diam.: 5

Iron disc with a hole in the center.

Found in mixed Crusader and Ottoman context.

132 Reg. No. 79/A/72/064; Area A, Locus 748, Bucket 406

L.: 5.2; W.: 5.2

Square iron frame.

Found in mixed Crusader and Ottoman context.

133 Reg. No. 79/A/71/100; Area A, Sq. H3, Bucket 117

L.: 1.7; W.: 1.7

Thin, square bronze plate with a hole at each midrib and tacks. Possibly used for furniture decoration.

Found in mixed Hellenistic and Roman context.

134 Reg. No. 79/A/71/102; Area A

Diam.: 3.7; Th.: 0.3

Shallow, bronze disc with a depression inside, possibly part of a candlestick.

135 Reg. No. 79/A/71/103; Area A, Sq. II, Bucket 645

Diam.: 2.8; Th.: 0.2.

Fragment of a bronze button(?)

136 Reg. No. 79/A/71/106; Area A, Sq. II, Bucket 550

Diam.: 2.6.

Bronze decorated lock(?). Unusual shape.

137 Found in mixed Byzantine and Islamic context.

Reg. No. 79/A/70/048; Area A

Diam.: 2.3

Round bronze medallion(?)

138 Reg. No. 79/A/73/060; Area A, Bucket 122

L.: 5; W.: 2.7; Th.: 0.3

Lead rectangular plate, decorated with incised floral pattern in the form of reeds.

Found in Late Persian (5th century BCE) context.

139 Reg. No. 79/A/73/061; Area A, Bucket 122

L.: 5.5; W.: 2.8; Th.: 0.3

Lead rectangular plate, decorated with incised pattern.

Found in late Persian (5th century BCE) context.

140 Reg. No. 79/Y/68/364; Area Y, Sq. Z14, Locus 28, Bucket 216

L.: 4.8

Bronze rod decorated with a floral pattern at one side and a wide open square that ends with a cap. May have belonged to a wooden box.

Found in Middle Bronze Age context.

12.16. Discussion

As mentioned above, the collection of artifacts is on the whole quite varied. However, the finds in each typological group are modest. Although the ceramic reading for Area A dates mainly to the Persian and Hellenistic periods, the dating of many of those finds is problematic and lacks precision. This is partially because they were not found in clear archaeological contexts and partly due to the nature of the finds. Many of the artifacts such as agricultural tools, knives, blades, cosmetic implements, surgical implements, needles, and pins have maintained their shape throughout the centuries, and as a result it is often difficult to date them. The only artifacts that can be dated with accuracy are some of the fibulae, although they too were used over a long period. The triple-winged bronze arrow heads are known from Persian sites and the tanged, barbed arrowheads are found in several sites that date to the Hellenistic period. The small group of weights date to several different periods, the earliest is a four shekel weight that dates to the Iron Age. One square, lead Hellenistic weight and two flat, bronze rectangular weights date to the Roman–Byzantine and early Umayyad periods.

The agricultural and working tools together with fishing tackle and many personal objects such as the fibulae and cosmetic instruments cover most aspects of material life in a small coastal town. It is interesting to note that there is no dominant group, nor one dominant period among the metal objects that prevails above others.

Bucket	Square	Date
9	H4	21/5/1971
12	H4	23/5/1971
13	—	—
13	H4	23/5/1971
18	I4	23/5/1971
20	H4	23/5/1971
21	I4	23/5/1971
22	—	—
24	I4	24/5/1971
25	H4	24/5/1971
28	H4	24/5/1971
32	—	—
40	—	—
43	I3	23/5/1971
45	H4	25/5/1971
52	I4	—
55	H3	26/5/1971
58	—	—
63	I4	26/5/1971
64	—	—
66	—	—
84	H3	28/5/1971
86	—	—
87	H3	28/5/1971
106	I3	31/5/1971
109	I3	31/5/1971
162	I3	4/6/1971
183	H2	6/6/1971
192	—	7/6/1971
222	I3	9/6/1971
223	I3	9/10/1971
257	I3	11/6/1971
263	I3–I4	13/6/1971
268	I3	14/6/1971
274	J2	13/6/1971
282	I4	14/6/1971
288	I3	10/6/1971
308	I3–I4	15/6/1971
309	I4	15/6/1971
374	—	—
375	—	—
431	—	—

Table 12.1. List of slag found in Area A, squares I3, I4, and H4.

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Figure 12.1. Agriculture and Craftsman Tools (1–9).



Figure 12.2 Fishing Weights and Hooks (10–12);
Domestic Tableware (13–26).



Figure 12.3. Needles (27–29);
Medical and Cosmetsical Instruments (30–35).

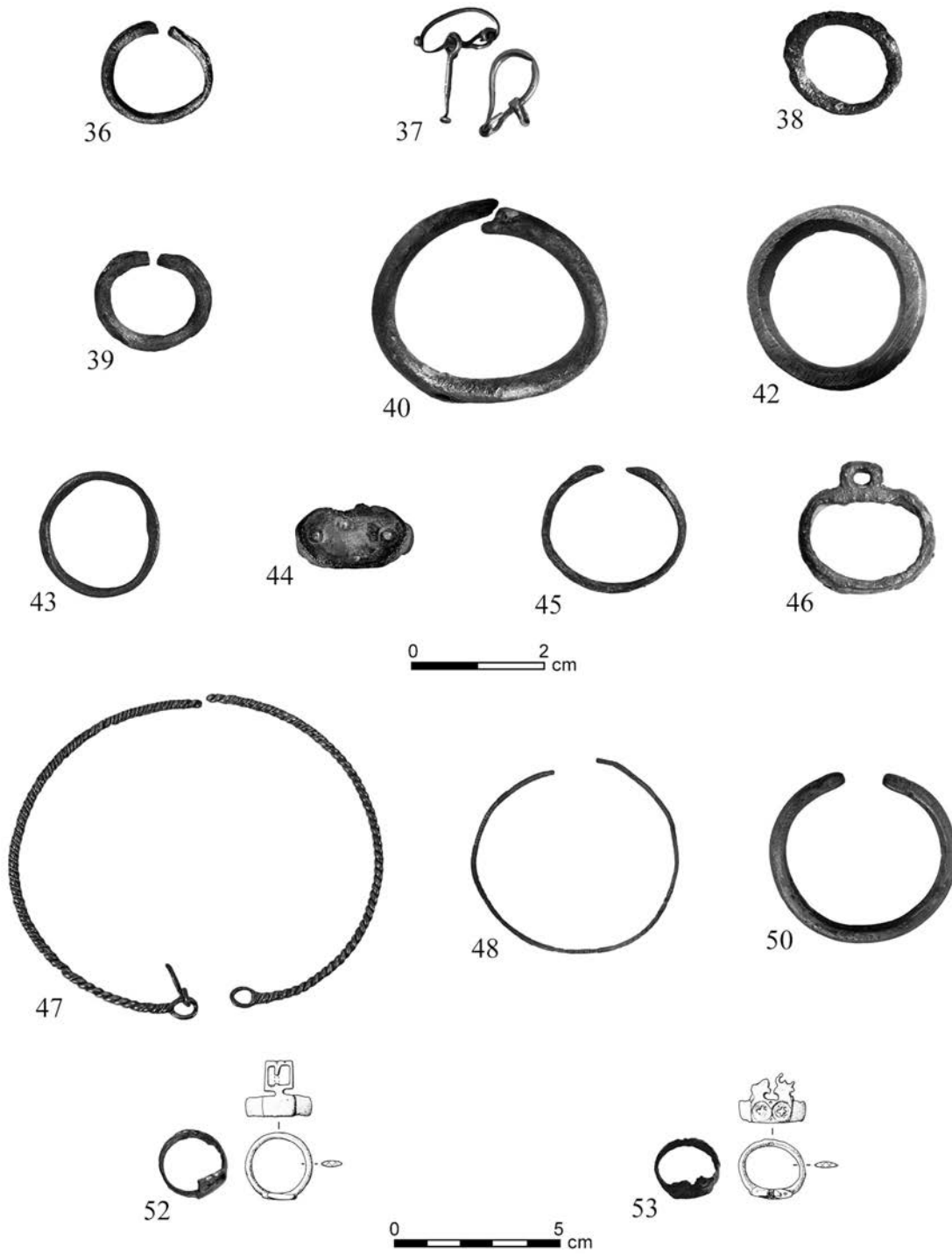


Figure 12.4. Jewelry (36–50), Key Rings (52–53)

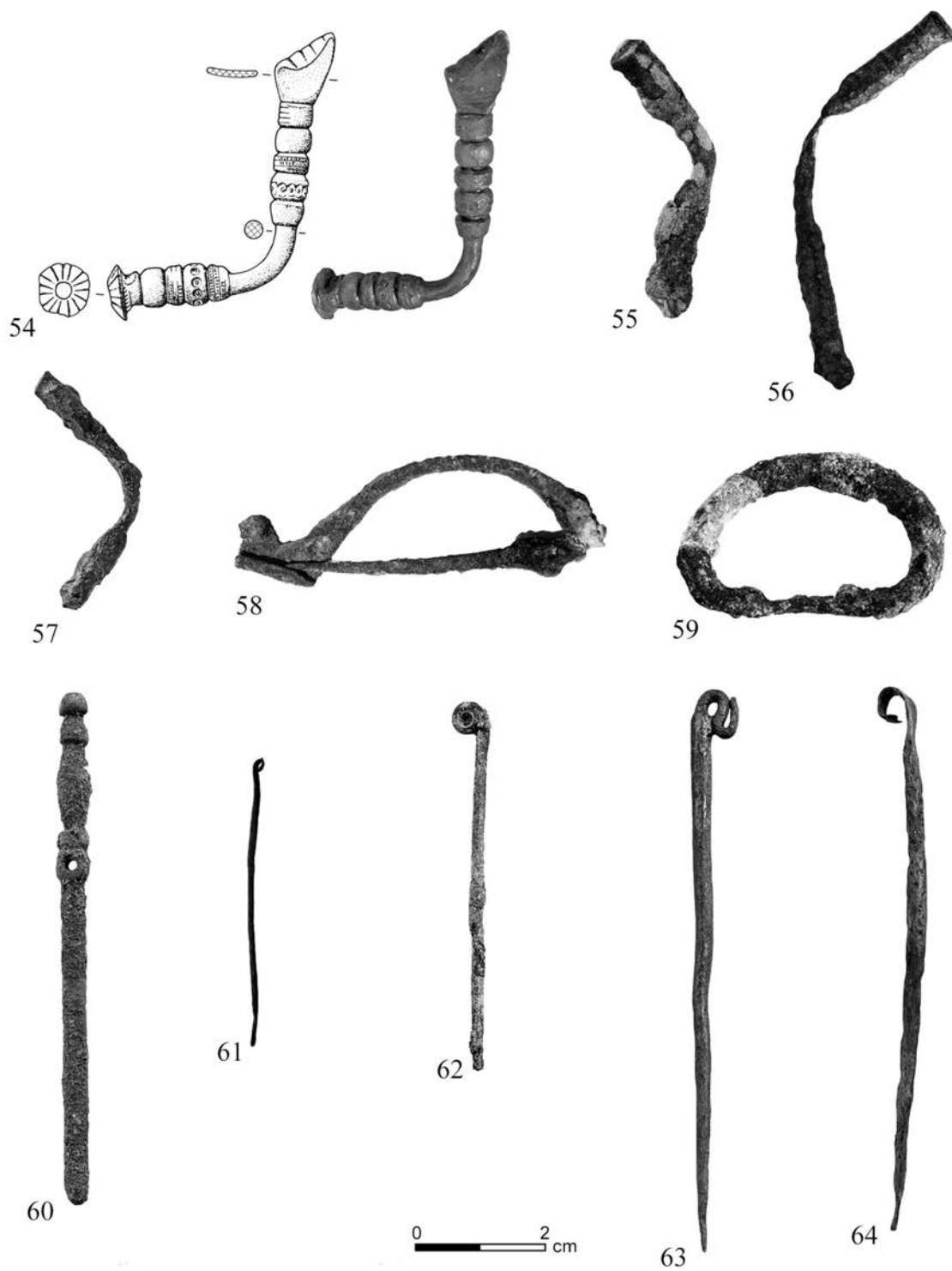


Figure 12.5. Fibulae (54–56), Straight Pins (57–64).

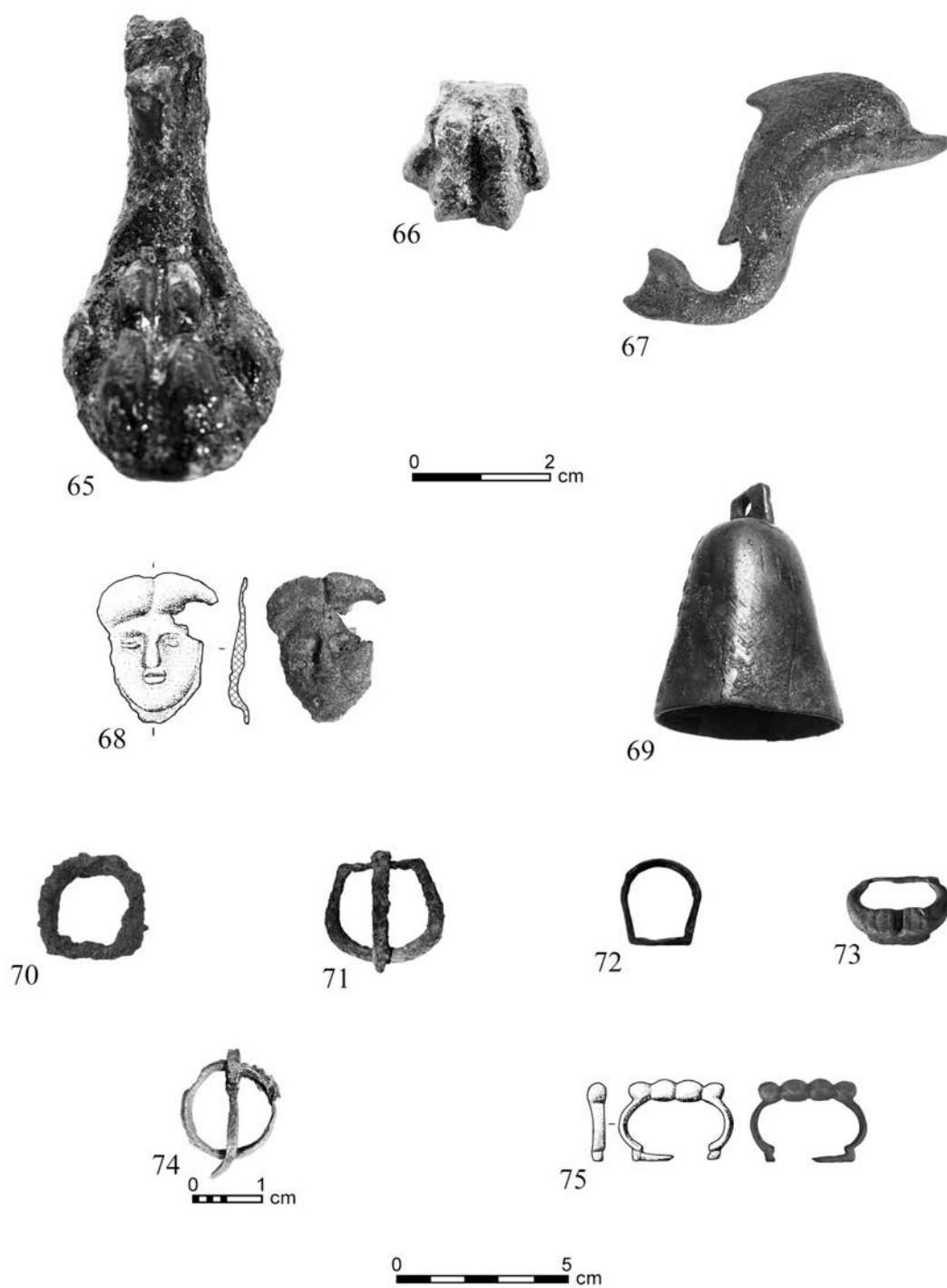


Figure 12.6. Bronze Figurines (65–69); Buckles (70–75).

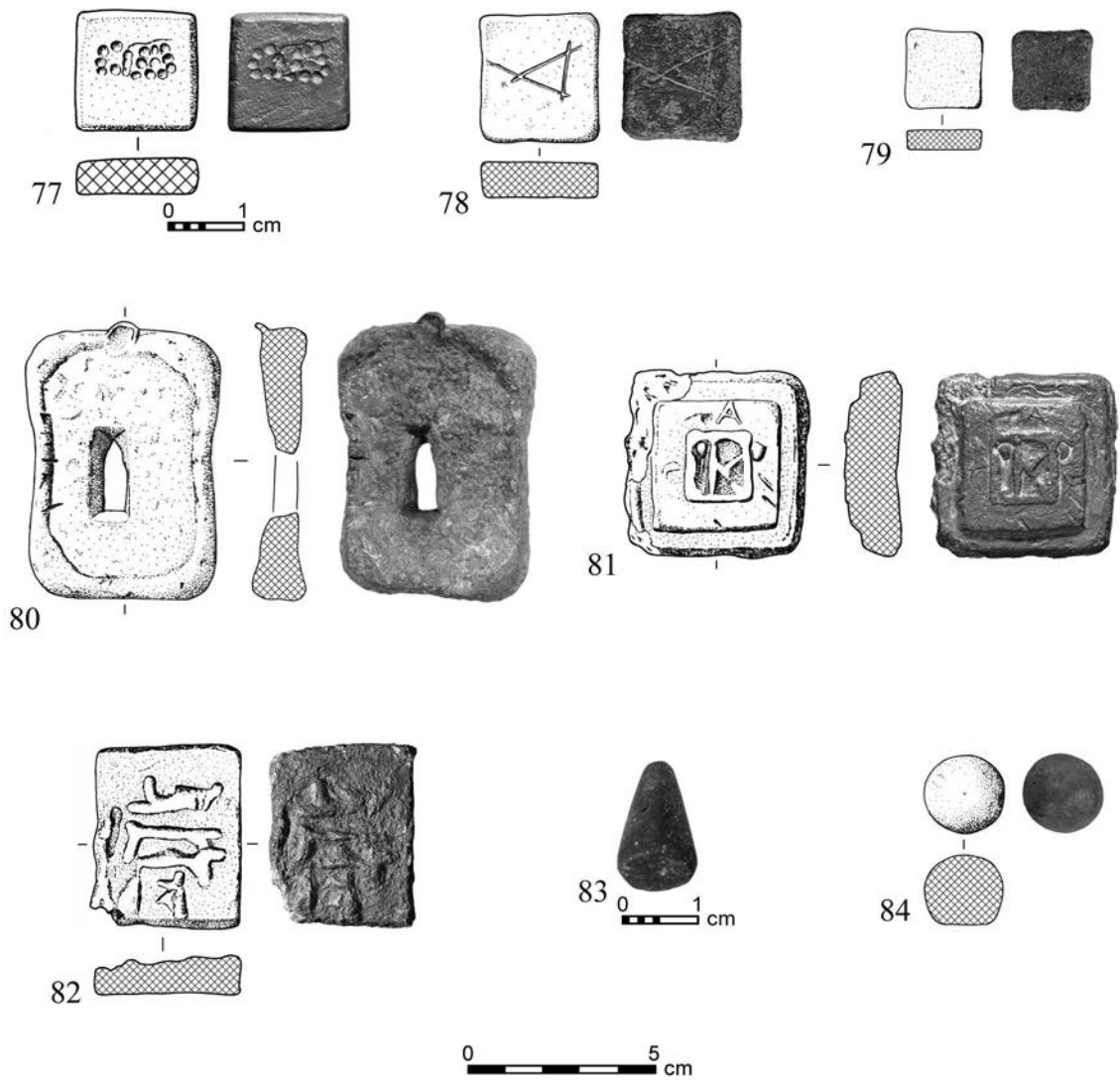


Figure 12.7. Weights (77–84).

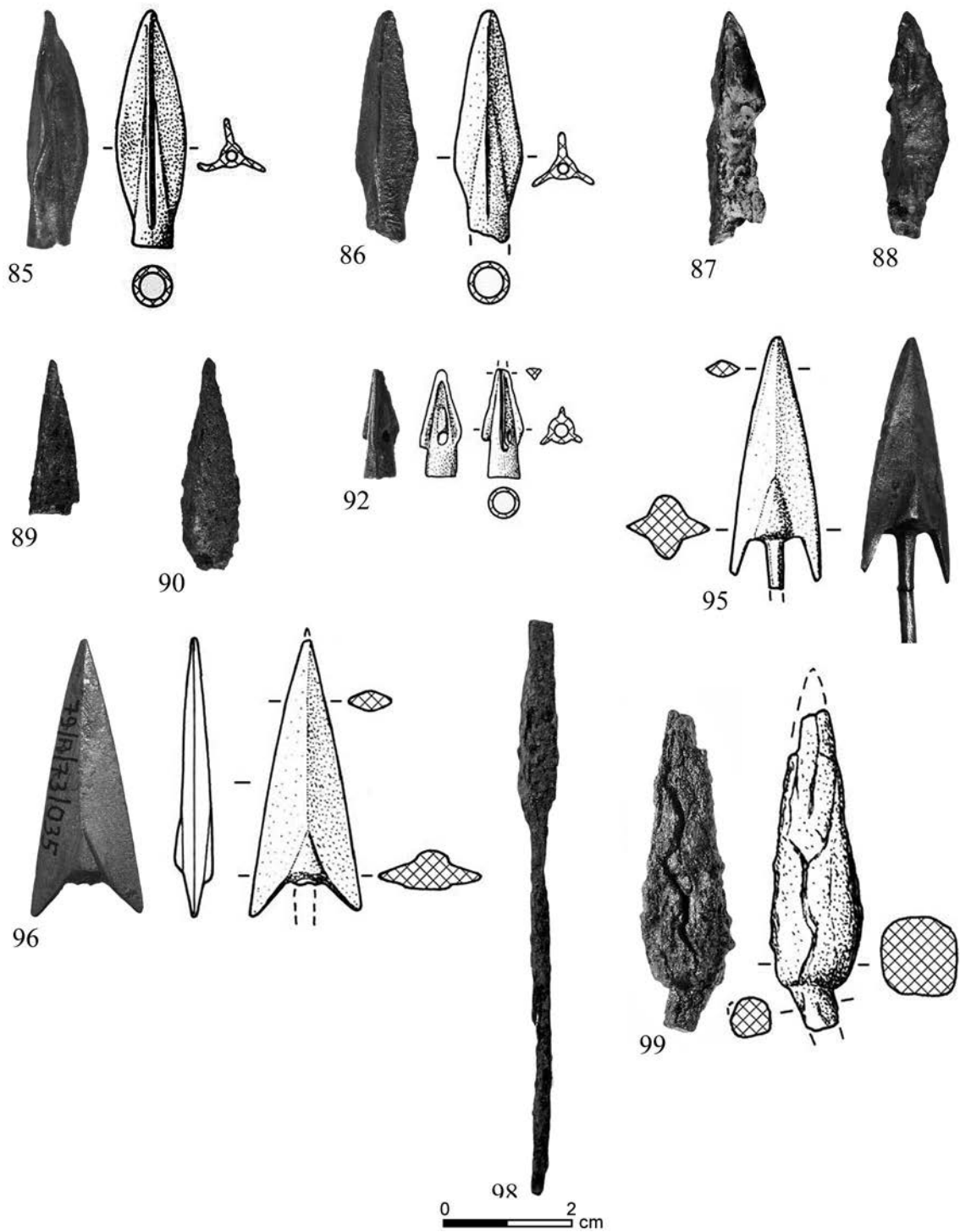


Figure 12.8. Arrowheads (85–99).

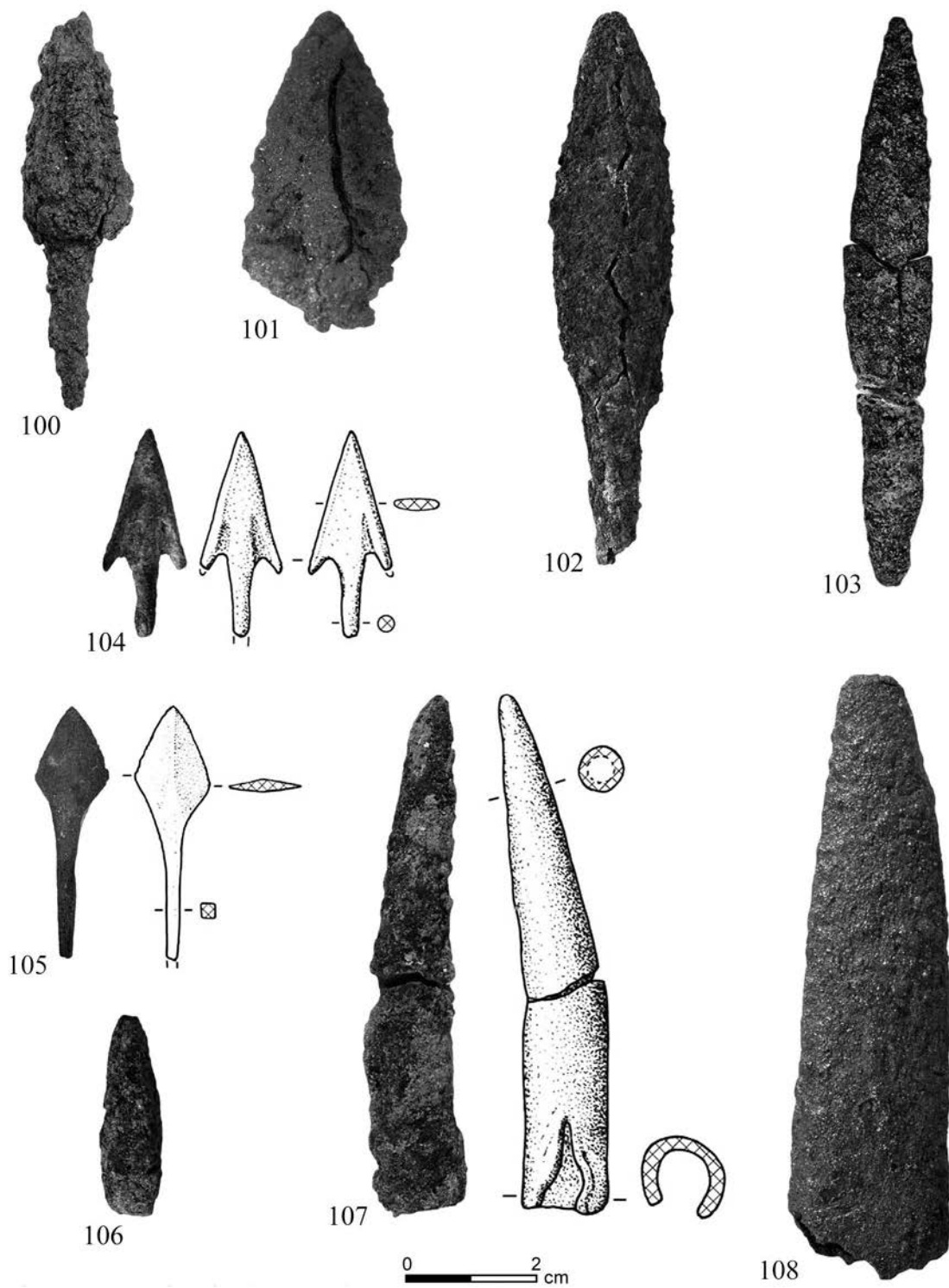


Figure 12.9. Arrowheads (100–108).

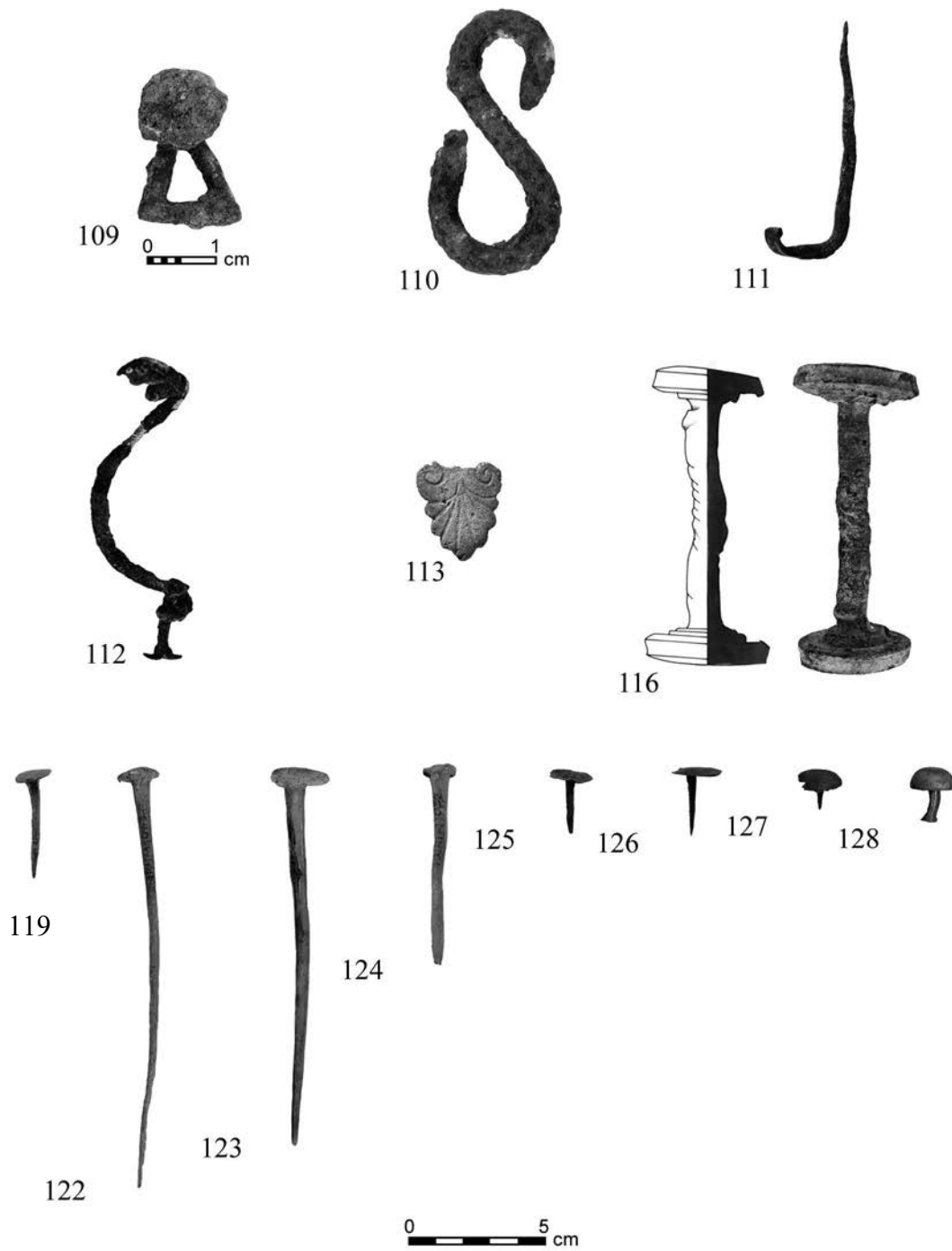


Figure 12.10. Hooks, Rings and Fittings (109–116);
Nails and Tracks (119–128).

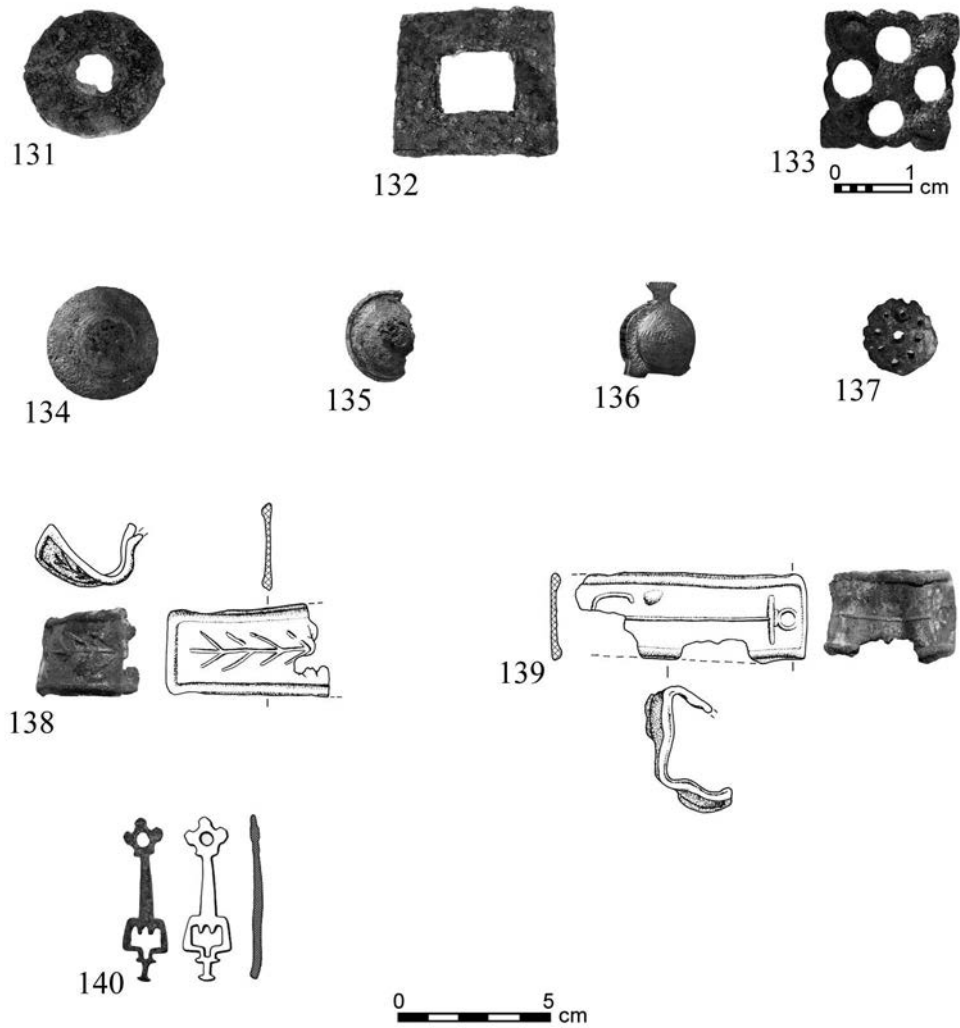


Figure 12.11. Miscellaneous (131–140).

Chapter 13. Bone, Ivory, Antler, and Horn Objects¹⁰¹

Etan Ayalon

This chapter deals with various objects made from “skeletal materials” (bone, ivory, antler and horn) unearthed in Jaffa by Jacob Kaplan. Fifty-six artifacts are discussed here. All artifacts were made of bone except one (no. 22) which was made of the much more expensive raw material, ivory. Three out of ten pieces of raw material and production waste are of antler and horn.

Many of the objects were relatively easy to define thanks to the accumulation of data on the subject from both Israel and other countries. Establishing their date, however, was more difficult due to the lack of information regarding their findspots and the exact dating of the loci in which they were found, and also because many of these types were in use for a long period of time. Therefore some of the artifacts could be only tentatively dated according to their typological parallels; a typical example is the spatula, which was in use during many periods with almost no change in shape. Due to the difficulties in dating these objects they will be discussed below in a typological order rather than chronologically or according to their findspots. A date is suggested whenever possible. It should be remembered, however, that only a few large assemblages of objects made from skeletal materials have been thoroughly published in Israel so far (i.e., Ariel 1990). Therefore the following discussion of the finds dating from the Hellenistic period onward is mainly based on the rich assemblage from Caesarea Maritima (Ayalon 2005a; 2005b), and the reader is referred to the discussions and references in these publications.

All measurements given below are the maximal dimensions of the objects. The parallels to the artifacts are listed in the following order: first those from Israel, then those from neighboring countries and, finally, parallels from other countries, especially in Europe.

13.1. Working Tools (Nos. 1–18)

These practical artifacts are usually simple and undecorated. Some of them were obviously made by an experienced artisan and intended for a long and sometimes professional and specified use, while other, simpler tools were probably prepared “by the user” for ad hoc use and then thrown away. Most of them are tools for boring or scraping or utensils connected with the textile industry. These simple tools were in use over long periods of time and are therefore difficult to date precisely.

Pointed Tools

The pointed tools were used for engraving, boring, weaving, applying materials such as cosmetics, etc. (Ayalon 2005a:18, 35–36). The exact use of the following objects is difficult to define as all are broken.

1 Pointed tool

Reg. No. 79/A/56/008; Area A, Sq. H5

L.: 7.7; Diam.: 0.5

Species/skeletal element: Bone

Broken tool with a relatively blunt tip. The absence of any sign of wear is probably the result of short-term use. It could be an engraver, an awl or even a stylus for writing on waxed tablets, although these are usually thicker (cp. Ayalon 2005a:36, fig. 10:121).

2 Pointed tool

Reg. No. 79/A/56/009; Area A, Sq. I7

L.: 7.6; Diam.: 0.7

¹⁰¹ I would like to thank Orit Tsuf for allowing me to publish these artifacts. The drawings were prepared by Sapir Haad. The photographs were taken by Gregory Vinitsky and Leonid Padrul–Kvitkovsky of the Eretz Israel Museum and by Anat Litan. Osteological identification was done by Moshe Sadeh. Yehoshua (Yeshu) Dray helped to clarify the function and production techniques of many objects. Moshe Fischer, Rivka Gersht, and Peter Gendelman helped in defining the carved tablet (no. 43) and finding parallels to it.

Species/skeletal element: Bone

Broken pointed tool. The tip shows signs of wear. It is possible that after it broke the other end was retouched in order to be used as a point.

It could be an engraver, an awl or a stylus.

3 Rod or pointed tool

Reg. No. 79/A/70/024; Area A, Sq. K4, Bucket 83

L.: 10.7; Diam.: 0.7

Species/skeletal element: Bone

Broken rod. The blunt end, which is a little thinner than the body, was originally round but is now partly broken. The object is dark with soot. It is possible that the tool was a stylus and the blunt end was the top part that was used to erase the writing on the waxed tablet (cp. Ayalon 2005a:fig. 10:119–120). It could also be a point, a pin, an engraver, or a spindle (see below).

Date range: Roman (1st – 3rd cent. according to Ayalon (2005a:36)

4 Pointed tool

Reg. No. 79/A/72/019; Area A, Locus 753, Bucket 652

L.: 10.3; Diam.: 0.5

Species/skeletal element: Bone

Broken tool with a short but sharp tip, which shines as a result of long use, possibly as a skin borer (leather can cause such gloss).

Locus date: Late Roman period

5 Rod

Reg. No. 79/H/64/030; Area H, Locus 403, Bucket 29

L.: 6.1; Diam.: 0.7

Species/skeletal element: Bone

Rod with both ends broken. The shaft is smooth and its upper part decorated with engraved horizontal and diagonal lines. It is too thick to be a pin (see below), but could be a spindle or an engraver.

Parallels: Caesarea (Ayalon 2005a:figs. 4:39, 10:116); Alexandria (“styli”, Rodziewicz 2007:35, 136–138, pl. 38:181–189); Mainz (Mikler 1997 T. 32:12, “pin”, Roman).

Spatulae and Scraper

The enigmatic spatula, usually made of sheep or goat rib, was in use from the Neolithic up to at least the Roman period, and was mostly common in Iron Age II. Many suggestions have been raised as to its use, mainly in the textile industry (see especially Ariel 1990:127–134; also Ayalon 1999:24; Smith 2001, “weaving beater”). It is reasonable to presume that this basic tool, in which both tip and lateral sides frequently show signs of wear, had many uses. The twelve spatulae found in Jaffa do not help in solving this enigma.

6 Spatula

Reg. No. 79/A/70/022; Area A, Sq. J3, Bucket 94

L.: 8.1; W.: 2.5; Th.: 0.25

Species/skeletal element: Sheep/goat rib

Front part of a spatula. The tip is centralized, its end broken. The sides were probably parallel. Remains of the spongy layer can be seen on the bottom.

7 Spatula

Reg. No. 79/A/70/023; Area A, Sqs. J3–J4, Bucket 138

L.: 5.7; W.: 1.9; Th.: 0.15

Species/skeletal element: Sheep/goat rib

Front part of a polished spatula. The tip is centralized and well worked. The sides were probably parallel. The tool is dark, probably with soot.

8 Spatula

Reg. No. 79/A/73/018; Area A, Sq. J100, Bucket 541

L.: 9.1; W.: 2.3; Th.: 0.2

Species/skeletal element: Sheep/goat rib

Rear part of a spatula. The sides were more or less parallel. The rear end is round.

9 Spatula

Reg. No. 79/A/74/030; Area A, Bucket 176

L.: 7.7; W.: 1.7; Th.: 0.15

Species/skeletal element: Sheep/goat rib.

Relatively small, delicate and polished spatula. Part of the round rear end is broken. The tip is centralized. One side of the point is a little rounded and bears diagonal striations on the top. The other side is straight and bears similar striations on the bottom, but in the opposite direction. These striations probably resulted from the work done with the tool. The sides were probably parallel.

10 Spatula

Reg. No. 79/A/74/031; Area A, Bucket 129

L.: 8.9; W.: 1.6; Th.: 0.2

Species/skeletal element: Sheep/goat rib

Clumsily-made narrow spatula. The tip is not centralized but it is possible that the original tool broke along its central axis and the left side (in the drawing) was then straightened for reuse. The right, slightly diagonal side was roughly smoothed. Signs of wear can be seen along the tip. The rear end looks broken but is relatively straight and might be the original rough end.

11 Spatula

Reg. No. 79/C/61/186; Area C, Bucket 713

L.: 4.7; W.: 1.7; Th.: 0.1

Species/skeletal element: Sheep/goat rib

Front part of a narrow spatula. The centralized tip is glossy and shows signs of wear on both sides as well as on the bottom.

12 Spatula

Reg. No. 79/Y/64/135; Area Y, Locus 602, Bucket 38

L.: 8.2; W.: 2.3; Th.: 0.1

Species/skeletal element: Sheep/goat rib

Intact thin spatula. The tip is a little off-centered but well-shaped. The rear part is round and narrower than the front part. A bead (79/Y/64/136) was found together with this spatula.

13 Spatula

Reg. No. A/72/B201; Area A, Bucket 201

L.: 6.6; W.: 2.7; Th.: 0.2

Species/skeletal element: Sheep/goat rib

Large broken spatula. Both ends are missing and the entire width is preserved only in one spot. Signs of wear caused by erasing can be seen on the top.

14 Spatula (two broken pieces)

Reg. No. A/72/B279; Area A, Bucket 279

Piece No. 1: L.: 4; W.: 1.6; Th.: 0.1

Piece No. 2: L.: 4.4; W.: 2.1; Th.: 0.1

Species/skeletal element: Sheep/goat rib

Two broken pieces of a thin spatula, which might have belonged to the same tool. In one of them only part of the left side and the beginning of the tip were preserved, in the other, the round rear end.

15 Spatula

Reg. No. A/72/B305; Area A, Bucket 305

L.: 3.2; W.: 1.2; Th.: 0.2

Species/skeletal element: Sheep/goat rib.

Part of a thin, polished spatula. Only the left rear part was preserved. The rear end is blunt and narrower than the blade.

16 Spatula

Reg. No. A/72/B366; Area A, Bucket 366

L.: 4.8; W.: 2.2; Th.: 0.1

Species/skeletal element: Sheep/goat rib

Part of a thin, polished spatula. Only the tip and part of the right side were preserved. The object is dark with soot.

17 Spatula

Reg. No. A/73/B443, Bucket 433

L.: 4.7; W.: 2; Th.: 0.1

Species/skeletal element: Sheep/goat rib

Part of a thin, polished spatula. Both ends are missing but the entire width is preserved.

18 Scraper/Polisher

Reg. No. 79/C/61/183; Area C, Locus 416, Bucket 233

L.: 13.5; W.: 3.2; Th.: 0.2

Species/skeletal element: Cattle or horse rib(?)

Rectangular thin tool completely preserved except for some very small pieces along the left side and in the upper end (in the drawing). The corners are a little rounded. Top, bottom and sides are smooth. Both sides bear longitudinal striations resulting from work done with the tool. The front end also shows signs of wear.

The tool was probably used to compress, scrape or polish soft materials such as wet clay or plaster, leather, paper, etc.

Locus date: 1st–2nd cent. CE

Parallels: Caesarea (Ayalon 2005a:20–21, figs. 4:49, Late Roman–Byzantine, “smoothing tool?”), 5:55, Roman, “pin-beater?”); Lyon (Béal 1983:374–375, pl. LXIII:1332, Roman, “potter’s tool?”); Augusta Raurica (Deschler-Erb 1998 T. 15:378, Roman, “pin-beater?”), Kärnten, Austria (T. 61:4569; Gostenčnik 2001:385, fig. 5:7, Roman, “weaving sword”); Austria (Gostenčnik 2005:222–223, fig. 5:5, Roman, “wax eraser?”); Mainz (Mikler 1997 T. 39:13, Roman, “weaving tool”).

13.2. Objects of Daily Use (Nos. 19–45)

19 Spindle?

Reg. No. 79/A/71/012; Area A, Sq. H2 (northern part), Bucket 694

L.: 21.5; Diam.: 0.8

Species/skeletal element: Bone

Cylindrical smooth rod, broken on both ends. The narrow end broke in a spot where the rod is narrower and perhaps there was a peripheral (decorative?) groove there. The object could be a spindle used for spinning with the aid of a spindle whorl attached to it (Ayalon 2005a:22; see below). Other possibilities, however, cannot be ruled out, such as a stylus, an engraver, the handle of a spoon, etc.

Parallels: Acre (Ayalon 1999:27, fig. 20, Roman); Mainz (Mikler 1997 T. 38:10–11, Roman, “spindle”).

20 Spindle whorl/button

Reg. No. 79/A/73/014; Area A, Sq. J100, Bucket 516

Diam.: 3.4; Th.: 1; Diam. of perforation: 0.5

Species/skeletal element: Bone

Circular object which was well turned on a lathe. The perimeter at the top is a little higher than the inner part while the center is even higher. The top is decorated with lathe-made grooves. The side is a little out-turned and decorated with a circumferential groove. The base is not entirely flat and bears circular lathe striations. The object could be a spindle whorl (the weight attached to the spindle rod; see Ayalon 2005a:22; Rodziewicz 2007:30–31), a button (for its attachment to the cloth see Becker 2005 fig. 7), a box lid (equipped with a tiny handle stuck in the central hole), a gaming piece, etc.

Parallels: Petra (Schneider-Naef 2005 Abb. 17, Roman, “box lid”); Lyon (Béal 1983:339–340, pl. LVIII:1223, Roman, “whorl!”).

Handles

Three artifacts are included in this group, each one of a different type. Only two of them (nos. 21–22), however, are certainly handles as it is often difficult to distinguish between a handle, a box (see below), a furniture

mount or even a tall gaming piece (for the various considerations see Ayalon 2005a:10, 39, 88). Usually, it is also impossible to define the exact tool to which the handle was attached, as it is seldom preserved.

21 Handle

Reg. No. 79/A/71/014; Area A, Sq. I2–I3, Bucket 558

L.: 7.3; W.: 2.1; Socket: L.: 4; Diam. 0.9

Species/skeletal element: Sheep/goat long bone diaphysis?

Part of a handle made from a hollow cylindrical bone. The rear end is complete and smoothly sawn, while the fore end and both sides are missing. The existing part was roughly decorated by hand with circumferential and diagonal (herringbone design) grooves. The ends of similar diagonal grooves preserved near the broken sides prove that the object was originally cylindrical. The grooves were not only decorative but also enabled a better grip of the handle. In the front part, a cylindrical socket was made using a drill with a round bit that was narrower than its shaft. The exact use of this rather simple handle cannot be determined.

Parallels: Jerusalem (Tushingham 1985:fig. 68:11, Medieval, “handle or bottle”).

22 Handle

Reg. No. 79/A/71/015; Area A, Bucket 748

L.: 5.9; W.: 1.9; Th.: 1.4; Diam. of pins: ca. 0.2

Species/skeletal element: Ivory

Rear part of a delicate handle, the only ivory object in this assemblage. The rear end is round and projects outward (a little piece is missing there), probably functioning both as a decoration and to improve the grip. The handle is thicker in the center and narrows again toward the front part. It is elliptical in section. The narrow groove sawn across the front part was less than 0.1 cm wide, in which the metal blade was installed. The blade has disappeared but the two diagonally-stuck pins which fixed it in place have been preserved. They are made of iron and caused rust stains around them and a crack along the axis of the handle. The width of the blade was approximately 1 cm. The object is dark with soot. It was no doubt the handle of a small delicate tool such as a knife for special purposes, a cosmetic applicator, etc.

Parallels: For the general shape, see Ayalon 2005a:fig. 3:24, 31–32 (Caesarea, Roman–Late Roman, the last two of folding pocket-knives); MacGregor 1985:fig. 88:I (Shakenoak, England, 4th cent. CE, of folding pocket-knife).

23 Handle?

Reg. No. 79/A/73/019; Area A, Bucket 49A

L.: 4.3; Diam.: 2.3; Diam. of perforation: 0.8–1

Species/skeletal element: Bone

Pear-shaped hollow and delicate object. Part of it was broken and filled (by the excavators?) with a white material. The top is sawn straight while the bottom is designed as two tiny steps, the inner one projecting a little more than the outer one, as if for attachment to another object. The steps are well polished but show no signs of wear.

The object could be the handle of a small delicate tool or part of a larger handle (see parallels). Other possibilities are a stopper or part of it, a gaming piece (although the bottom shows no signs of wear), the upper part of a hinge (see with references Ayalon 2005a:44), or even a large bead.

Parallels: Lyon (Sautot 1978:62, pl. XXVIII:2 = Béal 1983:129, pl. XXIII:316, Roman, an identical object mounted on a 6.2 cm long-bone cylinder, “unknown use”); Tallinn, Estonia (Luik 2001:324, fig. 24, 13th–14th cents. “gaming piece?”).

Boxes and Box Parts

This group includes two cylindrical boxes and two parts (a lock and a hinge) of rectangular pen-case-shaped boxes or caskets. The two hollow cylindrical objects were defined here as boxes, although it is often difficult to distinguish between a box and similar artifacts (see discussion of handles above). Both of them have the main characteristics of such a box, outer or inner flanges for the base and the lid. Those (at least the base) were necessary as the boxes were made of hollow cylindrical bones. The base was usually permanently glued in place (therefore the flange is usually on the inner side) while the lid could be removed when necessary.

Such boxes contained cosmetic materials, medicines, ink, needles, etc. (cf. Ayalon 2005a:39; Rodziewicz 2007:33).

24 Box

Reg. No. 79/C/61/185; Area C, Locus 432, Bucket 594

H.: 10.3; Outer diam. of top: 1.9; Outer diam. of bottom: 2.3

Species/skeletal element: Long bone diaphysis

Roughly cylindrical box (the bottom is a little wider than the top) with no lid or base. The body was very well polished on a lathe which left parallel striations on it. The decoration, which consists of pairs of ridges and grooves, was performed on the lathe as well. A flange for the lid was cut inside the top and another was cut inside the bottom for gluing a base. The medullar cavity was well cleaned and smoothed but was left very narrow in the central part. This phenomenon is atypical of boxes, in which the larger the cavity, the better. However, the shape of the cavity and existence of the flanges exclude the possibility that the object was a handle, a furniture mount, a hinge or a gaming piece. The box might have contained cosmetic materials, medicines, etc. or even short needles.

Locus date: 1st–2nd cents. CE

Parallels: Augusta Raurica (Deschler-Erb 1998, T. 44:4048, Roman); Mainz (Mikler 1997, T. 50:8–10, 51:1–5, Roman).

25 Box/pyxis

Reg. No. 79/C/65/536; Area C, Bucket 181

H.: 4.7; Outer diam. of top: 2.2; Outer diam. of bottom: 2.7

Species/skeletal element: Sheep/goat long bone diaphysis.

Cylindrical box (the bottom is a little wider than the top) with no lid or base. The body was well polished on a lathe. The decoration, which consists of a pair of ridges and a groove on the bottom, was also performed on the lathe. A flange for the lid was cut outside the top and another was cut inside the bottom for gluing a base. The medullar cavity was enlarged as much as possible and well smoothed. This type of a small box (“pyxis”) is rather common and might have contained cosmetic materials, medicines, etc.

Parallels: Ayalon 1999:39, fig. 44 (Roman); Alexandria (Rodziewicz 2007:160–162, pl. 44:264–266, 269). Augusta Raurica (Deschler-Erb 1998, T. 44:4049, Roman); Kärnten, Austria (Gostenčnik 2001:385, fig. 4:27, Roman); Lyon (Sautot 1978 pl. XXIX:4 = Béal 1983:79, pl. XV:84, Roman).

26 Lock?

Reg. No. NA; no indication of excavation area

Left part: L.: 3.4; W.: 1.4; Th.: 0.5

Right part: L.: 3; W.: 1.4; Th.: 0.5

Species/skeletal element: Bone

Two broken parts of an object with the left end (in the drawing) and the central part missing (therefore the distance between them in the drawing is conjectured). The top is flat and smooth. A groove runs along the three existing sides and it is reasonable to believe that such a groove existed on the fourth (left) side as well. An elongated perforation with rounded ends (only a small portion survived of the right end) was cut in the central part of the object (its total length is unknown as the center is missing). The edge of the right part consists of, from right to left, a rounded ridge and a depression and then a higher central part. The small portion preserved of the left side hints that it mirrored the other side and consisted of the same components. The bottom is flat. The top of both pieces is dark with soot.

This object is probably the moving part of a lock of a casket, book, etc. A (metal?) rivet which passed through the central elongated perforation was attached to the box. The discussed part could be moved from one side to the other using the rivet as an axis, the outer ridges used to lock it in place and the grooves cut along the outer narrow sides serving as tracks.¹⁰² This delicate and rare object was probably part of a valuable object.

Parallels: For a general comparison, see references in and Ayalon 1999:60, fig. 84; 2005a:43, fig. 14:146–147 (Caesarea); for a reconstruction of the use of the Caesarea object for locking a book, see Ayalon 2005a.

¹⁰² This reconstruction was suggested by Y. Dray.

27 Hinge

Reg. No. 79/A/70/025; Area A, Sq. K4, Bucket 163

L.: 1.5; Diam.: 1.7; Diam. of medullar cavity: 0.7

Species/skeletal element: Sheep/goat long bone diaphysis?

Short cylindrical object, smooth outside and spongy inside. The medullar cavity is not centralized. A perforation (0.5 cm diam.) was drilled a little diagonally from the side toward the medullar cavity. Concentric striations seen on both ends could result from the cutting of the object on the lathe or from its use as a moving hinge. The artifact bears soot stains.

This was part of a complete hinge of a casket or a similar small piece of furniture. Several such cylinders were mounted in a row on a bone or wooden rod, which was attached to the casket so it could revolve. Small pins stuck in the side holes of the hinges were attached to the casket door, so it could be opened or closed (for general discussion and reconstructions, see Bíró 1994:56–58; Beltrán de Heredia Bercero 2001:fig. 3; Jablonowska-Taracha 2001:fig. 7; Ayalon 2005a:44; Rodziewicz 2007:35–36).

Parallels: Jerusalem, Jewish Quarter (Geva 2003:pl. 13.1:B9, Early Roman); Dor (Stern 1994 Pl. 7, Roman); Alexandria (Rodziewicz 2007:152–155, pl. 42:237–246); Corinth (Davidson 1952:129, pl. 64:874, 2nd century); Hungary (Bíró 1994 Pl. LXX:594, Roman); Mainz (Mikler 1997 T. 54:13–15, Roman); Augusta Raurica (Deschler-Erb 1998 T. 46:4118–4219, Roman).

Decorative Objects, Personal Utensils and Jewelry

This group consists of a variety of artifacts which were used to decorate the human body as well as certain kinds of personal objects. Pieces of jewelry include pins (if indeed they were used to decorate the hair or clothes) and beads. Mounts and carved pieces decorated wooden objects and furniture. Artifacts for personal use are the pins (if they were used as cosmetic applicators, see below), the gaming piece and the doll (no. 42, if it is not a handle). This composition is not outstanding, although usually assemblages originating in large cities (especially from the Roman and Byzantine periods) consist, for instance, of many more pins (Ayalon 2005a:8–9), while in Jaffa the beads are more numerous. Most of these objects (except for the carved tablet, no. 43) were rather simply made and decorated and were perhaps of local production. The carved tablet probably originated from a central production center, either in Israel (such as Caesarea, see Ayalon 2005b) or abroad (such as Alexandria, see Rodziewicz 2007).

Pins

Bone pins are most commonly found in sites, deposits and especially graves of the Roman period and less so in those of the Byzantine period (for general discussions and more references see, for instance, Bíró 1994:30–35; Ayalon 2005a:51–52; Rodziewicz 2007:28–30). Perhaps more than any other object, their shapes, dimensions and dating changed very little throughout most of the Roman Empire and even beyond its borders. Similar pins were also made of metal, wood, jet, ivory, etc. Some types are very simple and were handmade (i.e., with a knife), while others were turned on a lathe and carved in beautiful shapes. They were usually made from pieces of long bone diaphyses. The different types of pins are usually defined by the shape of the head. Many of the simple pins were made as one piece, the head and shaft together, while in the more elaborate types the head and shaft were in many cases made separately and then joined together. The actual use of these pins is debated (see references cited above). The main suggestions are that they adorned and held dressed hair, or decorated or fastened clothing. Another claim is that they were used to apply cosmetics or wax. It is possible that the pins were used for all these purposes and even others. Only three identifiable pins and one broken shaft were found in Jaffa (it is possible that the points in Figure 1:1, 4 were also parts of pins), rather a small number for such a site (in Caesarea, for instance, one third of the finds were pins). All of them belong to the simplest and most common types (i.e., with a globular or a cylindrical head).

28 Pin

Reg. No. 79/A/73/013; Area A, Locus 752, Bucket 574

L.: 2.5; Head L.: 1.4; Diam. 1.2

Species/skeletal element: Bone

The pin was turned on a lathe as one piece, head and shaft together. The head is almost globular. A tiny shallow depression on its top is probably what remained of the adjustment of the object to the lathe. Most of the shaft is missing.

Locus date: 3rd–4th cents. CE

Parallels: Ayalon 2005a:fig. 20:182–184 (Caesarea, Roman–Late Roman); Jablonowska-Taracha 2001:fig. 1:8–10 (Alexandria); Rodziewicz 2007, pls. 49–53 (Alexandria).

29 Pin

Reg. No. 79/C/61/187; Area C, Bucket 70

L.: 5.1; Head: L.: 1; Th.: 0.8

Species/skeletal element: Bone

Handmade pin with a thickened, asymmetrical and a little flattened head. The shaft, also not circular in section, is a little thinner toward its upper part. Its lower part is missing. The pin was carelessly made but smoothed.

Parallels: See no. 28 above.

30 Pin

Reg. No. 79/C/61/188; Area C, Bucket 552

L.: 8.5; Diam. of shaft: 0.4

Species/skeletal element: Bone

Upper part of a simple pin, with both ends broken. The head is separated from the shaft by a ridge and a groove. The shaft, which narrows downward, is smooth.

Parallels: Caesarea (Ayalon 2005a:fig. 21:207, Byzantine).

Beads

Eleven beads were found in Jaffa, the largest subgroup in the assemblage. Drawings of three of them are presented here. One of them (no. 31) and two others, which are not illustrated belong to the common doughnut-shaped type. Another one (no. 32) and four others are flattened. No. 33 and two others are of various shapes. The shape of these beads differed little over time, so it is difficult to date them without accurate stratigraphic data. Scholars debate whether some of these objects were beads or buttons. The identification of no. 33 as a bead is not certain.

31 Bead

Reg. No. 79/A/71/017; Area A, Bucket 680

Diam.: 2.3; Th.: 0.6; Diam. of perforation: 0.7

Species/skeletal element: Bone

Doughnut-shaped bead, not entirely symmetrical but smoothed. The peripheral part is thinner than the center. The perforation was well drilled.

Parallels: Jerusalem, City of David (Ariel 1990:139:fig. 20:B160–B162, Persian to Byzantine periods, “buttons”); Jerusalem, Jewish Quarter (Geva 2003, pl. 13.1:B4, Early Roman); Dor (Stern 1994, pl. 7, Roman); Alexandria (Rodziewicz 2007:216–217, pl. 58:468, “button”); Augusta Raurica (Deschler-Erb 1998 T. 61:4575, 4577, Roman).

32 Bead

Reg. No. 79/A/71/019; Area A, Sq. L3, Bucket 626

Diam.: 1.6; Th.: 0.5; Diam. of perforation: 0.6

Species/skeletal element: Bone

Flattened bead with a protruding ridge around its edge. The perforation is large relatively to the size of the object. Well-made and painted green.

Parallels: Northampton (MacGregor 1985:fig. 58:I, Medieval).

33 Bead?

Reg. No. 79/Y/64/140; Area Y, Bucket 13

L.: 2.1; Diam.: 1.4; Diam. of inner cavity: 0.8–0.9

Species/skeletal element: Bone

Pear-shaped delicate object made and smoothed on a lathe. The inner cavity was also well smoothed. The “rim” on both edges is rounded. A circumferential groove decorates the narrower part of the cylinder.

Its similarity to the object in Figure 2:23 (despite the difference in size) makes it possible that this, too, was part of a small handle or another kind of jewelry.

34 Bead

Reg. No. 79/A/70/017; Area A, Sq. K4, Bucket 160

Diam.: 1.8; Th.: 0.4; Diam. of perforation: 0.6

Species/skeletal element: Bone

Flattened bead with a relatively large perforation. It is polished and bears smoothing marks. Dark with soot?

35 Bead

Reg. No. 79/A/70/026; Area A, Sq. J4, Bucket 32

Diam.: 1.7; Th.: 0.4; Diam. of perforation: 0.5

Species/skeletal element: Bone

Flattened bead, partly broken. It is asymmetrical and clumsily made. It resembles bead No. 32.

Parallels: See no. 32 above.

36 Bead

Reg. No. 79/A/71/018; Area A, Bucket 254

Diam.: 2.1; Th.: 0.4; Diam. of perforation: 0.6

Species/skeletal element: Bone

Flattened, partly broken bead, asymmetrical and roughly made. Dark with soot?

37 Bead

Reg. No. 79/A/72/020; Area A, Locus 509

Diam.: 2.1; Th.: 0.8; Diam. of perforation: 0.7

Species/skeletal element: Bone

Doughnut-shaped bead with a relatively large perforation, similar to no. 31. It is smoothed and dark with soot.

Locus date: Late Persian

Parallels: See no. 31 above.

38 Bead

Reg. No. 79/A/73/015; Area A, Sq. J101, Wall cleaning, Bucket 356A

Diam.: 1.8; Th.: 0.9; Diam. of perforation: 0.6

Species/skeletal element: Bone

Thickened bead with flat top and bottom and round edge.

39 Bead

Reg. No. 79/A/73/016; Area A, Locus 752, Bucket 431

Diam.: 1.3; Th.: 0.9; Diam. of perforation: 0.6

Species/skeletal element: Bone

Worn-out bead with a relatively large perforation.

Locus date: 3rd–4th cents. CE

40 Bead

Reg. No. 79/Y/64/136; Area Y, Locus 602, Bucket 38

Diam.: 1.7; Th.: 0.4; Diam. of perforation: 0.5

Species/skeletal element: Bone

Flattened bead of non-uniform thickness. A groove running from the perforation toward the edge is probably natural. The bead was found together with the spatula shown in Fig. 1:12.

41 Bead

Reg. No. 79/Y/64/137; Area Y, Sq. 6, Bucket 78

Diam.: 2.1; Th.: 0.7; Diam. of perforation: 0.6

Species/skeletal element: Bone

Doughnut-shaped bead with a well drilled perforation.

Locus date: Early Roman

42 Doll(?)

Reg. No. 79/C/61/184; Area C, Locus: “under mosaic floor”, Bucket 117.

L.: 12.6; W.: 2; Th.: 0.6

Species/skeletal element: Long bone diaphysis of a large mammal.

Elongated and decorated object. Its top is missing but the remaining part shows that it narrowed upward. From the widest point (the shoulders?) the object narrows downward as well. The bottom is sawn straight. Part of one side in the lower section is missing. The carved decoration on both front and back is identical: Between the “shoulders” two circle-and-dot designs are probably the eyes. On each side facet of the object, in the same level, is a small scratched sign in the shape of a # (not drawn); these marks possibly represent the ears. Below the “eyes” a centralized circle-and-dot design is probably the mouth. The approximate center is defined by two parallel horizontal grooves which possibly represent the belt. The lower part is covered with diagonal parallel grooves which may symbolize a garment. On one of the main facets (the front?) a horizontal groove runs across the bottom, possibly representing the feet.

This object is probably a schematic doll. Although its findspot (“under a mosaic floor”) could mean a relatively early date, the general shape and decoration as well as the parallels cited below point at a date in the Early Islamic period. The fanciful, sometimes even articulated dolls/figurines of the Roman period became more and more schematic during the Islamic era, no doubt on religious grounds (Ayalon 2005a:80). Similar simple dolls of the style called ‘Coptic’ could be used just as they were, but in other cases, such a bone object (although usually smaller) was only the head which was stuck into a cloth doll. A well known complete example was found in Nessana (Colt 1962:51, pl. 29:5).

Another possibility that cannot be ruled out is that the object was the handle of a castanet. Two perforations were drilled near the top of such a handle, so that two bone tablets could be tied to it, one on each side. When the tool was shaken, the tablets hit the handle, making a rhythmic sound (see, with references, Ayalon 2005a:122).

Parallels: Doll: Török 1993:64, pl. XCVII:p25–p26 (Egypt, Early Islamic); for schematic doll head, see Ayalon 2005a:fig. 31:312–313 (Caesarea, Early Islamic); for the general shape and decoration of handle, see Ayalon 2005a:fig. 57:546 (Caesarea, Late Byzantine); Ayalon 2006:670:fig. 23.1:7 (Beth-Shean, Byzantine); Rodziewicz 2007:125, pl. 34:146 (Alexandria, “handle”); See also Mazar 2003:33, pl. I.4:11 (Temple Mount, Jerusalem, Late Byzantine, “tablet”).

Carved Pieces

Bone and Ivory carved pieces were mainly used to decorate wooden objects such as furniture and caskets, but sometimes also book bindings and other leather artifacts. Some were inserted within depressions made in the decorated object and glued in place, while in others holes were drilled so that they could be attached by pins. Various definitions are known from the literature for these objects, such as carved pieces, inlays and furniture mounts. The meaning of each name, however, is in debate among the scholars (see, with references, Ayalon 2005a:88–89). Two decorated pieces were found in Jaffa.

43 Carved tablet

Reg. No. 79/A/72/016; Area A, Locus 752, Bucket 606

L.: 5.7; W.: 3.5; Th.: 0.5

Species/skeletal element: Long bone diaphysis of a large mammal

Part of a carved tablet, with the bottom and both sides broken. Its curved section, following the shape of the cylindrical bone, shows that it was probably attached to a rounded object such as a furniture leg. The top is complete, carved as a rounded ridge decorated with short diagonal grooves in opposite directions, similar to those below them. Two small broken projections left on the rim were possibly used to attach this piece to another one, both being parts of a larger scene. The central carved figure preserved on the tablet is that of a standing man seen from his back (a rather unusual position; cp. Marangou 1976 pl. 31a:98), looking to the right. His hair is curly but it is also possible that he wears a wreath. The upper part of his body is naked. His left hand is broken while the right one is stretched and holds the ankle of a bare leg of another individual in an upside down position. Two parallel lines that cross the man’s hips behind his back probably define the other leg of the second figure. Below this leg the remaining part of the scene

is broken. Near the broken right side of the tablet part of an unidentifiable object can be observed. The space above the figure(s) is filled with diagonal grooves in opposite directions.

The scene is not easy to interpret because it has been only partly preserved. It seems to be an erotic scene, with the male (Dionysus or a satyr?) having sexual intercourse with the female who lies with her legs up. Similar scenes are known from Roman art, for instance on lamps (e.g., De Simone and Merella 1975:107, left column, second picture from top) and murals (e.g., Jacobelli 1995:fig. 37). Another interpretation which cannot be ruled out is that this is a part of a satiric scene performed in a Roman theater (compare: Pappalardo 2007:198).¹⁰³

The tablet belongs to a large group of bone and ivory carved pieces that were especially common in the Late Roman and Byzantine periods. In the past many of them have been defined as “Coptic” and of Alexandrian origin, but today it is believed that there were several manufacturing centers of them, even in Israel (cf. Rosenthal 1976:96–97; Goldfus and Bowes 2000:186).

Locus date: 3rd–4th cents. CE

Parallels: See above.

44 Decorated piece

Reg. No. 79/A/73/017; Area A, Bucket 118

L.: 6.7; W.: 2; Th.: 0.6

Species/skeletal element: Long bone diaphysis of a large mammal

Part of a decorated tablet in which the left side (in the drawing) and one end are broken. The narrow end broke along one of the two preserved attaching perforations, which was a weak point in the object. The preserved part of the right side is sawn straight for easy attachment to a wooden (?) object. The tablet is decorated with two rows (originally there were probably three rows) of circle-and-dot designs, carelessly performed and located. They were carved with a center-bit or toothed drill with a forked head (Ayalon 2005a:136–137; cp. MacGregor 1985:fig. 38). The perforations were drilled along the central line of designs. If they had been drilled symmetrically, the full original dimensions of the tablet would have been 9.1 cm long and 2.8 cm wide.

This decorated tablet was attached with pins to an object such as a wooden casket or a piece of furniture or to the handle of a knife or a similar object.

Parallels: Bacharach and Rodenbeck 2002:33:fig. 4.B4 (Fustat, Egypt, “amulet or pendant” with two hanging holes); Bíró 1987:fig. 8:41 (Brigetio, Hungary, Roman); MacGregor, Mainman and Rogers 1999:fig. 915 (York, Medieval).

45 Gaming piece/inlay

Reg. No. A/70/B13; Area A, Bucket 13

L.: 3.1; W.: 2.8; Th.: 0.5

Species/skeletal element: Long bone diaphysis

Flat octagonal object. It is asymmetrical, rather carelessly made and roughly smoothed. The top is decorated with circle-and-dot designs in the following order: a group of seven in the center and eight designs around the periphery. The bottom is spongy.

This artifact could be either a gaming piece or an inlay.

Parallels: Fustat (Bacharach and Rodenbeck 2002:34, fig. 7.B7, “gaming piece”); Dunapentele and unknown site, Hungary (Bíró 1994:43, 99, pl. LIII:463, 467, Roman, “casket mounts”); Barcelona (Beltrán de Heredia Bercero 2001:187, nos. 202–203, Roman, round “gaming pieces”).

¹⁰³ I would like to thank Prof. Pappalardo who kindly offered his opinion and the reference to his book through Prof. Moshe Fischer.

13.3. Production Waste (Nos. 46–56)

Several types of finds testify to the fact that objects made of skeletal materials were produced at a certain site: pieces of raw material and blanks that were never used, unfinished objects, and production waste material. The Jaffa assemblage includes several pieces that show that bone, antler and horn artifacts were locally produced. Ten out of 56 finds discussed here belong to this category, which makes 17.8%.¹⁰⁴ In Caesarea, for instance, about 23% of the finds checked by the author were production waste of bone and ivory artifacts, although no workshop was found in situ (Ayalon 2005b). Besides Caesarea, a large production center of skeletal materials artifacts operated in Ashkelon (mostly unpublished; see Wapnish 1991). Smaller scale production is known from several other sites such as Tell es-Safi (Kolska Horwitz et al. 2006), Jerusalem (Ariel 1990:141; Horwitz 1990:145; Geva 2003:347–348), Sepphoris (Meyers and Høglund 1998), and Samaria (Reisner, Fisher and Lyon 1924:16, no. 16; 28, no. 1). It is interesting to note that at least three out of ten pieces of production waste were of antler and horn, while none of the finished objects discussed above was made of these raw materials.

46 Gaming-die production waste

Reg. No. 79/A/56/312; Area A

L.: 15 The sawn end width.: 1.9; Th.: 1.7

Species/skeletal element: Distal epiphysis of young cattle metacarpus

Long bone diaphysis that was sawn across approximately in the center of the shaft, leaving sawing striations. It was sawn almost completely and then the other part was broken off, leaving a small projecting scar. Most of the remaining part of the cylindrical shaft was planed along its axis, creating four straight and smooth facets and a rectangular section. Two holes were drilled near the natural pneumatic foramen: A larger perforation was drilled at the center from one side to the other (as attested by the difference in diameter between its two outlets). A smaller hole was diagonally drilled into the larger one. The purpose of both perforations is unclear.

This rough-out was probably prepared for the production of hollow dice (cp. Schmid 1980:Abb. 1). Solid dice were produced from the wall of a thick long bone diaphysis, which explains their relatively small dimensions (face length 6–14 mm). Larger dice had to be made from complete sections of such a bone with cortical bone thick enough to allow them to be planed so as to give them a square cross-section. Therefore their size was also limited but could reach at least 26 mm. The medullar cavity of a hollow die was filled with a complete long stopper or with two thin lids in order to get six facets for carving the die numbers (Ayalon 2005a:72, fig. 27:281–282).

The possibility that this artifact was a handle with a pin stuck in the perforation for holding the blade in place can be ruled out based on three reasons: a) the medullar cavity was never cleaned or enlarged, b) the perforation was drilled right at the end of this cavity, and c) the rectangular section of the object makes it uncomfortable to hold in hand.

47 Unfinished carved rod

Reg. No. 79/A/71/013; Area A

L.: 6.7; Diam.: 1.7

Species/skeletal element: Bone

Unfinished carved cylindrical rod which was made from the wall of a thick long bone diaphysis (it is a little flattened in section as the cortical bone was not thick enough). The lower end (in the drawing) is sawn straight and the lower part of the rod was never carved. The remaining section was carved on a lathe into a series of moldings, grooves, depressions and convex sections. The upper end is shaped as a tenon in which the lathe indentation has been preserved.

These nice rods were, as complete objects, parts of lattice work (*meshrebiyya* in Arabic), as shown by similar wooden pieces common in the Levant up to the present day (cf. Lane 1836:8; Ayalon 2005a:89, and pl. 9). The rods were attached to a wooden frame by the flat or rounded tongues or tenons projecting

¹⁰⁴ It should be borne in mind that other pieces of production waste may have been included in the archaeo-zoological assemblage and therefore are not discussed here. Also, sometimes it is difficult to distinguish between production waste and remains of butchery, such as the case in the last object in this group (see below; cp. Cope 1999; Ikram 2002).

from their ends (for another interpretation, see Wapnish 1991:59). The discussed object from Jaffa was installed for carving on a lathe equipped with an iron point which held its upper end (in the drawing) on one side and a wooden support attached to the lathe arm, on the other end (Ayalon 2005a:138). The lower part of this artifact was never carved. Sometimes such carved rods were sawn vertically into two halves which were then attached to a wooden utensil as decorative elements (Ayalon 2005a:fig. 46:430–436; Dray 2005:250).

Parallels: Caesarea (Ayalon 2005a:fig. 46:426–429, 8th–10th cents. CE [no. 429]); Ashkelon (Wapnish 1991:59, lower photo, left; cut along its axis, “furniture or box decoration”); Fustat (Kubiak and Scanlon 1989:57, fig. 87, 11th cent. and Bacharach and Rodenbeck 2002:34, fig. 11.B11); Alexandria (Rodziewicz 2007:139–146, pls. 39–40 nos. 193, 199–201, 207, 214; pl. 107:7, 5th–7th cents. [Rodziewicz 1984:245, n. 236]).

48 Sawn astragalus

Reg. No. 95/A/72; Area A

L.: 7; W.: 4.5; Th.: 1.2

Species/skeletal element: Probably cattle astragalus

A flat slice sawn from the middle part of an astragalus.¹⁰⁵ Both facets were probably smoothed after the sawing but as a result of the spongy material this process left no signs. The slice was probably prepared as raw material for the production of a flat artifact such as a gaming piece (compare to no. 45 in Figure 3), an inlay, etc.

Parallels: Jerusalem, City of David (Ariel 1990:198, 201, fig. 25:B1); Dor (Stern 1994, pl. 7, Roman, perforated, “gaming piece,” exhibited in the Dor Museum with wool string wrapped around it); Corinth (Broneer 1947:241, pl. LXI:20 top row, 3rd–2nd cent. BCE, “markers”; Davidson 1952:217, pl. 100:1753, “gaming piece?”); Delphos (Amandry 1984:356–359, figs. 15–16, from a sacred cave in which thousands of astragali were found, Hellenistic, “amulets or ritual objects”).

49 Sawn antler

Reg. No. 79/A/71/010; Bucket 664

L.: 3.2; Diam.: 2.5

Species/skeletal element: *Dama mesopotamica* antler

Cylindrical piece of antler. The thicker end was completely sawn while the thin end was sawn almost completely and then broken, leaving a projecting scar. It could be either a raw piece for the production of a cylindrical object such as a hinge, or production waste.

50 Sawn antler

Reg. No. 79/A/71/011; Area A, Sq. I3, Bucket 449

L.: 7; W.: 4.1

Species/skeletal element: *Dama mesopotamica* antler

Segment of the lower part of an antler. The burr was sawn four different times in various directions. The cylindrical antler itself was completely sawn. Three other sawing marks were left on the remaining part. One of them encircles the whole cylinder (i.e., it was sawn while the antler was turned around in the artisan’s hand).

Parallels: MacGregor 1985:fig. 32.

51 Sawn horn

Reg. No. 79/A/71/253; Area A, Bucket 274

L.: 17.7; W.: 3; Th.: 1.6

Species/skeletal element: Cattle horn

Elongated piece of horn that was sawn straight along its axis and diagonally in its lower part. In the diagonal cut the saw went astray twice along the way through. The thin end is broken.

This piece could be used for the production of inlays, handle coatings, etc.

52 Sawn bone

Reg. No. A/72/289; Area A

L.: 5; W.: 4.2

¹⁰⁵ A complete cattle astragalus and part of another one were also found, but as they show no sign of treatment they are not discussed here.

Species/skeletal element: Distal long bone diaphysis of small cattle

Segment of a long bone. The cylindrical end was sawn straight while close to the joint the bone was cut by at least four blows of an axe and possibly also partly sawn.

Parallels: MacGregor 1985:fig. 30.

53 Sawn bone

L.: 9.5; W.: 3.5

Species/skeletal element: Bone

Segment of bone with the narrower end broken. The wider end was sawn almost completely and then broken, leaving a projecting scar. The piece is probably some sort of production waste.

54 Sawn bone or antler

L.: 5.5; W.: 2

Species/skeletal element: Bone or antler

Piece sawn along both narrow facets and along one of the long facets, and broken along the other long facet. It is probably some sort of production waste.

55 Worked bone?

Reg. No. C/65/B758; Area C, Bucket 758

L.: 10.3; W.: 4.2; Th.: 2.3

Species/skeletal element: Long bone diaphysis

Part of a long cylindrical bone. The shaft is broken while the distal epiphysis was cut away with an axe. Other marks left by axe blows can be seen near it. It is impossible to conclude whether the bone is a piece of production waste or just a butchery left over.

13.4. Conclusions

Although the Jaffa assemblage is relatively small it includes many of the kinds of objects made throughout the ages from skeletal materials, especially those made of bone such as working tools (probably mostly connected with the textile industry), and objects of daily use such as boxes, jewelry, decorative pieces, etc. Pieces of production waste testify to the fact that bone, antler and horn artifacts may have been made in Jaffa, as at other sites in Israel. Most of the artifacts are relatively simple, many of them probably locally made, sometimes even for ad-hoc use only. A few of them (such as nos. 22, 24, 26, and especially 43, which could have been imported from Roman Egypt) reflect high-quality craftsmanship.

Despite the lack of accurate stratigraphic data on many of the finds it seems, judging by the parallels from other sites, that most of them are from the Hellenistic, Roman, and Byzantine periods. Some artifacts, especially the spatulae, probably date to pre-Roman times (Iron Age–Persian period?) while a few others (such as 42) possibly date to the Early Islamic period.

Fifty-two out of fifty-six finds from Jaffa were made of bone, three of antler and horn, and only one (less than 1.8%) of ivory. In Caesarea, for comparison, 130 out of ca. 3,900 objects (3.3%) were made of ivory, a rather reasonable quantity in such a large urban center. On the other hand, only one artifact from Caesarea was made of antler, while in Jaffa three pieces of production waste were of antler and horn. *Dama mesopotamica* antler could have been achieved in the hilly hinterland of both Jaffa and Caesarea. The use of antler in ancient Israel has been much more restricted than in Europe, a subject which has still to be more deeply investigated in the future.

As for the domesticated animals whose bones were used in Jaffa as raw material, all identifiable bones belong to either sheep/goats (for delicate objects such as the spatulae) or cattle for larger artifacts. Only one object (no. 18) could have been made from horse bone. This is not an unusual picture as these were the most common farm animals around. Finds from other sites, however, are usually more varied in the aspect of animal species whose bones were used to prepare utensils of daily life.

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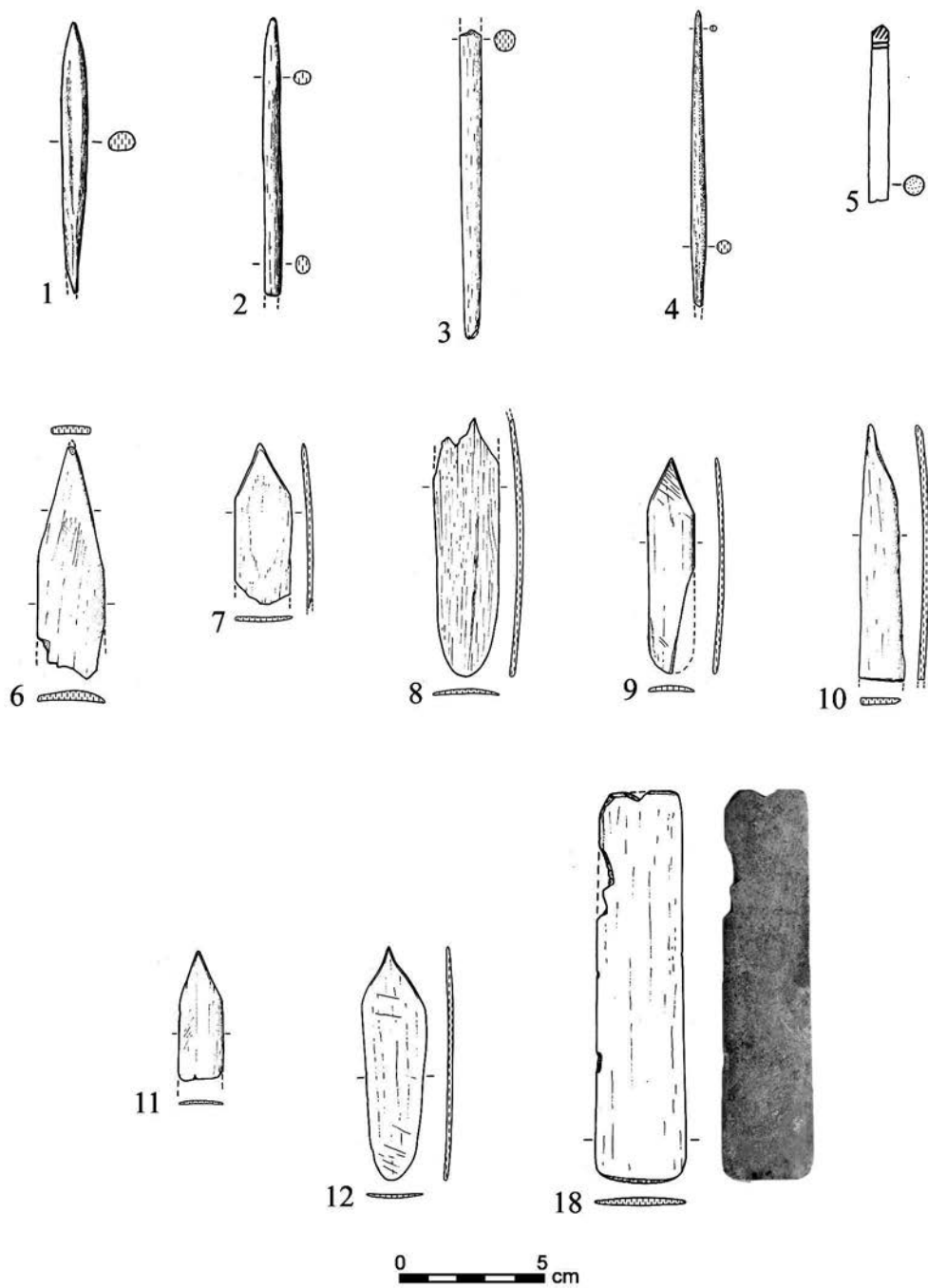


Figure 13.1. Working Tools .

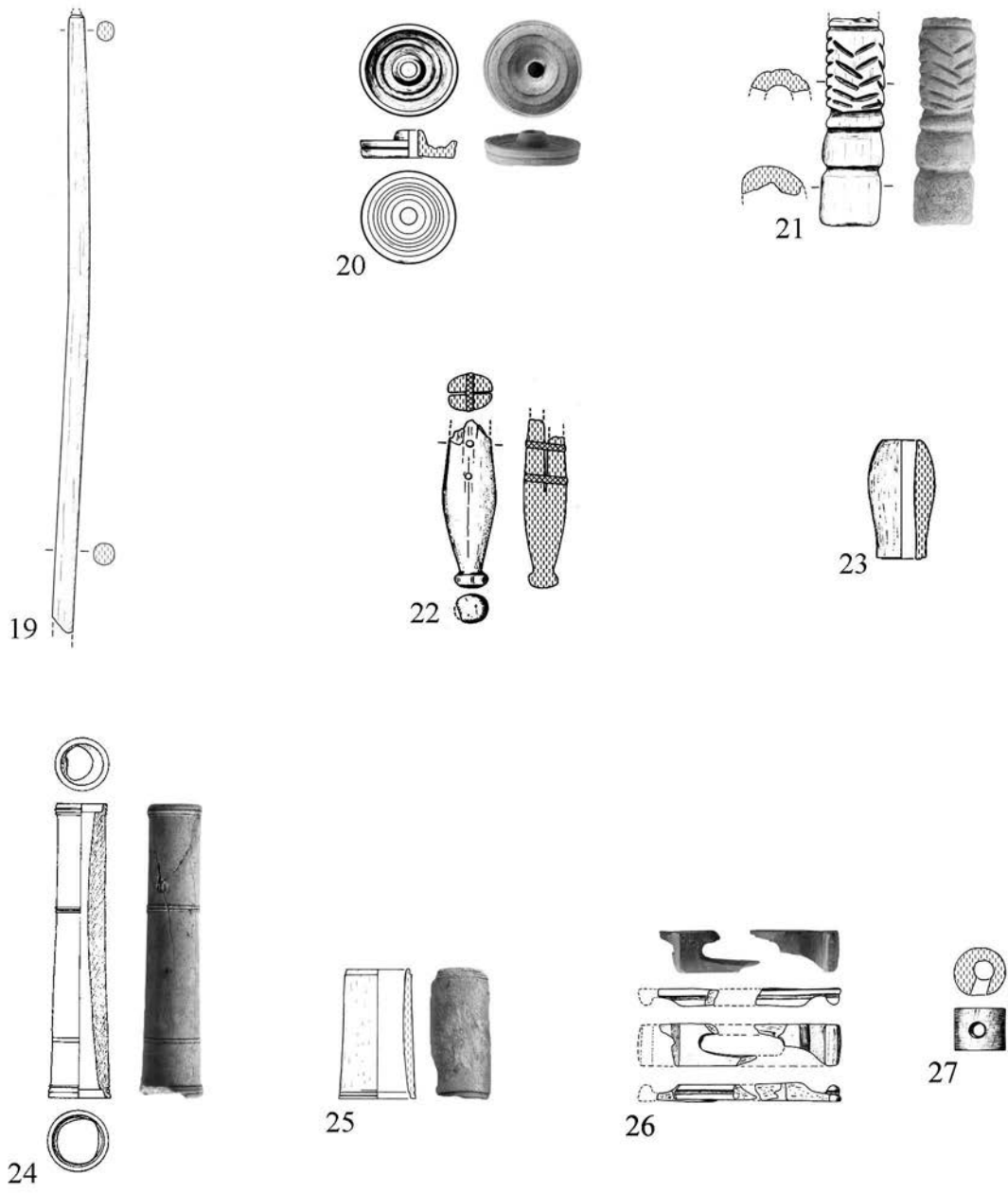


Figure 13.2. Objects of Daily Use.

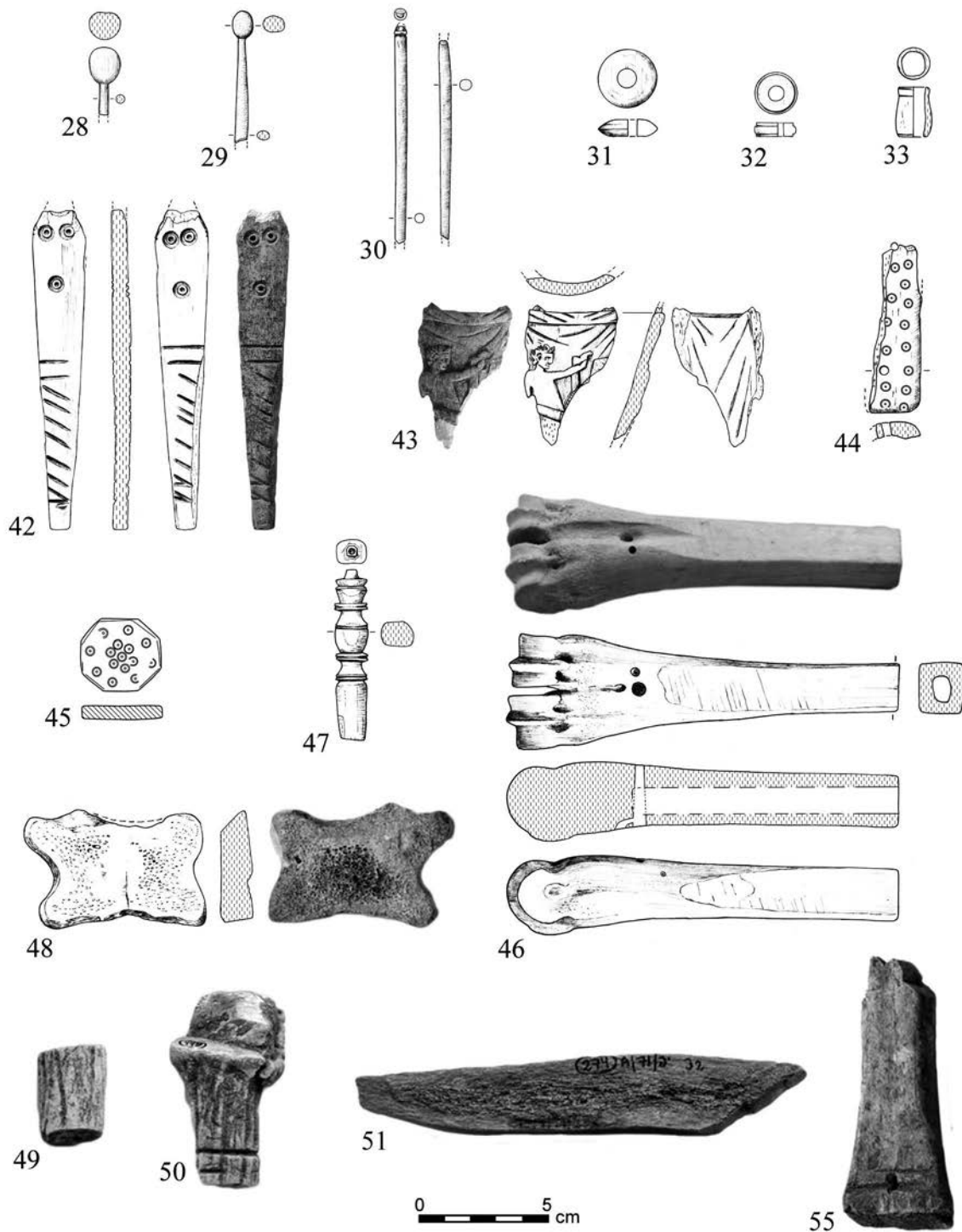


Figure 13.3. Decorative Objects, Personal Utensils and Jewelry (28–45);
Production Waste (46–55).

Chapter 14. The Stone Vessels

David Amit¹⁰⁶ and Yonatan Adler

14.1. Introduction

The stone vessels presented in this chapter were uncovered during the course of numerous excavation seasons conducted by Jacob Kaplan in Jaffa, intermittently between the years 1955–1982. These vessels are grouped according to stone type, manufacturing technique, and form. Finds from all of Kaplan's excavation areas in Jaffa have been presented together, and the provenance of each vessel has been noted. Whenever possible, the stratigraphic context within which the vessels were discovered has been presented as fully as possible.

None of the vessels presented in this chapter derive from sealed loci, and the stratigraphic contexts of many of the vessels could not be ascertained with any degree of confidence from an examination of Kaplan's excavation notes. Nevertheless, the richness of the Jaffa stone vessel assemblage, in terms of both the unusually large quantity and the variegated nature of the material, have provided important insights into the settlement history of Jaffa and the ethno-religious nature of the city's population during the Persian, Hellenistic, and Early Roman periods. A comparative study of the stone vessels from Jaffa with both published and unpublished stone vessel assemblages from other sites throughout the country has also provided a unique opportunity to reassess the historical development of the region's stone vessel industry, which by the end of the Second Temple period had grown into a large-scale, mass-production industry. A precise understanding of these developments, catalyzed by religious and cultural concerns, is an essential requisite to any attempt to reconstruct the cultural history of Judaism during the late Second Temple period.

14.2. Hard Chalk Objects

Ledge-Rim Pedestal Bowls

Bowls fashioned from hard chalk form a distinct and well-defined group of stone artifacts. These vessels were made from a form of hard chalk that exhibits a veined or marbled complexion and a tinged appearance ranging in color from light-yellow to dark-pink. The closest available source of this form of chalk is in the foothills of Samaria, over 20 km east of Jaffa.

The Jaffa corpus is comprised primarily of ledge-rim bowl fragments and tall trumpet bases. The rim fragments and bases apparently belonged to a single vessel type, a ledge-rim pedestal bowl standing on a tall trumpet base. Two relatively complete examples of stone bowls bearing this form were found in Samaria (Reisner, Fisher and Lyon 1924:337, fig. 210:IV1a; Kenyon 1957:465–66, fig. 117:6; cf. Cahill 1992:191–92). The Jaffa assemblage includes eight fragments of ledge-rims (1–8) and four fragments of trumpet bases (9–12). All of these vessels were hand carved, and polished smooth with abrasive material. The majority of these fragments (2, 4–7, 10–12) were discovered in Area A, and although poor record keeping precludes a precise dating of the material from this area, we may presume that these fragments derive from the Persian–Hellenistic period occupation levels that clearly predominate in this excavation area.

One ledge-rim fragment (1) was discovered in Stratum 7a of Sounding X, together with a Rhodian amphora, a fragment of painted Attic pottery, and numerous Hellenistic period ceramic remains. Another ledge-rim fragment (3) was uncovered on the surface of the Early Hellenistic stratum of Area Y, located immediately below the ruins of modern buildings. An additional ledge-rim fragment (8) was found in Area J in a stratigraphic context that could not be ascertained. One base fragment (9) was discovered in Area T in a stratum dated to the Hellenistic period, in the vicinity of the Hellenistic tombs.

The first and most comprehensive study to date on this group of vessels was published by Jane Cahill as part of the final report on the City of David excavations conducted by Yigal Shiloh during the years 1978–1985 (Cahill 1992:191–198, fig. 14). In this groundbreaking study, Cahill proposed that the hard chalk ledge-rimmed bowls and trumpet bases from the City of David belong to a vessel type found at sites located

¹⁰⁶ Dr. David Amit passed away and did not see this report in its latest stages of editing.

throughout Israel, noting comparative finds at Tell Keisan, Samaria, Shechem, Tell en-Nasbeh, Tel Michal, Tell el-Ful, the Armenian Garden in Jerusalem, Ashdod, Lachish, and Maresha (Cahill 1992:192–194). While these vessels have been variously identified in published excavation reports as being made from “limestone,” “polished stone,” or even “marble,” Cahill has suggested that all of these parallels may in fact have been made of the same type of hard chalk as the bowls from the City of David assemblage (Cahill 1992:192, 197). Where reliable dating has been possible, these finds have generally been dated to the Persian–Hellenistic periods. Cahill proposed that these bowls appear to be local imitations of identically shaped imported bowls made of calcite alabaster. A similarity in form was also noted between these bowls and stone bowls from Persepolis, as well as a group of local ceramic bowls dated to the Persian–Early Hellenistic periods, ca. 6th–4th centuries BCE (Cahill 1992:193).

Cahill’s conclusions regarding the geographic distribution of this vessel type have been subsequently called into question. While the form of the ledge-rim bowls from the City of David undoubtedly has clear parallels in finds from numerous sites throughout the Israel, it remains unclear whether or not any of the ledge-rim bowls found at these sites are in fact made of the same distinctive veined, tinted hard chalk as their City of David counterparts. The lack of adequately documented comparative material has led some scholars to contend that the distinctive group of ledge-rim bowls made of hard chalk was unique to Jerusalem (Reich 2003:265; Geva 2006:219).

The relatively large assemblage of hard chalk vessels from Jaffa, in addition to published material from Horvat ‘Eleq (Kol-Yaakov 2000:488, pl. IV:3) and a substantial number of unpublished objects from Maresha (Peshin 2001:80–87, pls. 46–47) Yodfat (Aviam 2005:115–116, fig. 64), and Horvat Burnat (Amit, Torgü, and Gendelman 2008:127) confirm Cahill’s assertion that ledge-rim bowls made of veined and tinted hard chalk were not limited to Jerusalem, but rather enjoyed a much larger distribution throughout various regions of the country. The stratigraphic evidence of the comparative material from the City of David and from additional sites such as Tell Keisan, Yodfat, Tel Michal, Maresha, and Lachish (Cahill 1992:196–197; Peshin 2001:80–87; Aviam 2005:115) indicates that these vessels first appeared in the Persian period, and continued to be in use into the Hellenistic period. Evidence from the Jewish Quarter excavations has shown that these vessels continued to be in use into the late 2nd or early 1st century BCE. (Reich 2003:265). As we have seen above, the assemblage from Jaffa fits squarely into this chronological scheme.

Small Bowls

Area A yielded a number of additional stone bowls fashioned from the same variety of hard chalk as the ledge-rim bowl fragments discussed above. A fragment of a small bowl with a thickened flat base (13) was found in association with the Hellenistic fortress dated to the 3rd century BCE; a similar bowl fragment has been found in the Hellenistic temple at Beersheba dated to the 2nd century BCE (Derfler 1993:129, fig 8:2). A fragment of a small bowl with a flattened rim and a disc base (14) was discovered near the Persian period ashlar wall in Area A, presumably in a Persian–Hellenistic period context; a close parallel from Stratum VI in Tel Michal dates to 350–300 BCE (Singer-Avitz 1989:353, pl. 31.4:13). A fragment of a bowl with a flattened rim and ring base (15) was found in Building M in Area A, dated to the Late Persian–Hellenistic period.

Cosmetic Palette

A fragment of a small rectangular stone with an oval indentation on its upper surface and a flat base (16), which appears to have served as a cosmetic palette, was also uncovered in Area A.

Spouted-Rim Bowl

A fragment of a spouted-rim bowl made of yellowish-tinted hard chalk (17) was also uncovered in Building M. Hard chalk bowl fragments with similarly shaped spouted rims have been found at Maresha (Peshin 2001:88–90, pls. 48:35, 49:39) and in the Jewish Quarter excavations in Jerusalem (Reich 2003:268, pl. 8.4:6–7). A fragment of a similarly shaped bowl made of beachrock was uncovered nearby in Area A (see

below: 94). These were apparently local imitations of a foreign type of vessel usually made of marble, examples of which have been found in Delos (Deonna 1938:109–114, fig. 136) and Corinth (Davidson 1952:122–123, Nos. 816–820). Two examples of this vessel type have been discovered in Samaria, one made of marble (Kenyon 1957:466, fig. 118:7), and the second made of basalt (Reisner, Fisher and Lyon 1924:337, pl. 211:3a). A complete parallel made from pinkish chalk has been found in Herodium (Loffreda 1996:130–132, fig. 58:183, photo 64). Another example of this type of spouted-rim vessel made of fine-grained basalt has been found in a Hellenistic period shipwreck excavated off the Carmel coast (Reich 2003:268). The vessels of this type discovered at Delos have been identified as mortars based on the discovery of pestles in close proximity, and the presence of red stains on the interior of the bowls, presumably the result of grinding condiments or perhaps colorants for the production of dyes (Deonna 1938:111).

Bowl with Pierced Ledge Handle

This hard chalk bowl fragment has a grooved, flattened rim with a grooved and pierced ledge handle (18).

Grinding Bowl?

A fragment of a shallow, flat-rimmed dish with a curved wall and a disc base (19) may tentatively be identified as a grinding bowl. Shallow incisions appear around the interior side of the rim.

Scale-Weight

A semi-hard chalk scale-weight found in Area C (20) belongs to a weight type common in the 1st century C.E., with a squat cylindrical shape (5 cm diam., 2.5 cm height), slightly convex upper and lower surfaces, and rounded edges. The mass of this scale-weight measures 147.32 gm. Similarly shaped stone weights have been uncovered in late Second Temple period contexts in the Jewish Quarter excavations (Reich 2006), in the vicinity of the Temple Mount (Reich *forthc.*; 2015:74–85), in Masada (Reich 2007b) and elsewhere (cf. Reich 2006:352–359; 2015). The discovery of a Second Temple period stone weight in Jaffa is significant, as the vast majority of these weights have been found in Jerusalem (96%); outside of Jerusalem, weights of this type are extremely rare (two at Qumran, and only a single weight at each of a handful of other sites: Gamla, Ramat Hanadiv, Qalandiyeh, ‘Ein Feshkha, and En-Gedi; cf. Reich 2007b:212; 2015:220). Thirteen stone weights have been found at Masada, although these are also conjectured to have come from Jerusalem (Reich 2007b).

In a groundbreaking metrological study of late Second Temple period stone scale-weights from the Jewish Quarter excavations, Reich suggested that from the 2nd half of the 1st century BCE until the year 70 C.E., four distinct systems of weight measurement were introduced one after another, and proposed an absolute dating for each of these systems (Reich 2006:359–375; 2015:180–219). Based on the measured mass of the Jaffa scale-weight (147.32 gm), this weight can be attributed to Reich’s Measuring System II (Group 24), a measuring system identified by Reich as having been in use during the latter part of the first century BCE through the 1st quarter of the 1st century C.E. (Reich 2015:170–179).

Another phenomenon noted by Reich regards the relationship between the proportional dimensions of the scale-weights (diameter-to-height ratio) and their relative chronologies (Reich 2006:372–373 Table 18.17; Reich 2015:177–179 Table 47). Reich found that the earlier cylindrical weights (dating to the later part of the 1st century BCE through the 1st quarter of the 1st century C.E.) exhibit a diameter-to-height ratio of approximately 2.0, while weights attributable to the later measurement systems (introduced after the 1st quarter of the 1st century C.E.) display a considerably lower ratio, (i.e., the earlier weights were more squat). The dimensions of the Jaffa weight exhibit a diameter-to-height ratio of 1.86 on average, corresponding with the proportional dimensions found in Jewish Quarter weights that date to the turn of the Common Era.

Pestle

This object bears an hourglass-shape, and apparently served as a pestle (21).

14.3. Soft Chalk Vessels

The second half of the 1st century BCE saw the appearance of a large repertoire of chalk vessels: cups, pitchers, bowls, goblets, basins, platters, large barrel-shaped jars, hole-mouth jars, tables, and more. These vessels enjoyed an extremely wide geographic distribution, with fragments having been found at over 250 sites in Judea, Galilee, the Golan, and Peræa in Transjordan (Adler 2011, table 2, maps 9–9*). Chalk vessel fragments have been found almost exclusively at sites which can be attributed to a Jewish settlement, and the domestic use of these vessels was apparently a uniquely Jewish phenomenon. Most of the vessels in this repertoire were in widespread use over the course of approximately 175 years, from the 2nd half of the 1st century BCE until the Bar-Kokhba revolt (Magen 2002:162; Gibson 2003:301–302; Geva 2006:221; Adler 2011:161–220; 2017a).

According to rabbinic law, stone vessels are considered impervious to ritual impurity (cf. Sifre Numbers, Matot:157; BT. Shabbat 58a; BT. Menahot 69b). No doubt, such a quality would have been highly valued during the late Second Temple era when issues relating to ritual purity played a central role in Jewish religious life. The use of chalk tableware and storage vessels helped safeguard the ritual purity of foodstuffs, which were apt to become ritually defiled through contact with impure vessels. This practice appears to lie behind the gospel of John's explanation that the stone water jars featured in the wedding at Cana narrative were associated with "the purity (laws) of the Jews" (John 2:6 lit.).

A limited number of chalk vessel production centers have been located and identified to date. Two quarries and workshop sites have been excavated northeast of Jerusalem, in Hizma (Magen 2002:1–62) and on Mount Scopus (Amit, Seligman, and Zilberbod 2008). Two additional sites near Jerusalem have also yielded remains of chalk vessel production, in Tell el-Ful (Gibson 1996:18*) and in Jebel Mukkabar (Magen 2002:2). Evidence of chalk vessel production has also been found in the Galilee in Reina (Gal 1991), at Bethlehem of Galilee (Oshri 1998) and at 'Einot Amitai near a-Reina (Amit 2010). We may presume the existence of additional chalk production centers in Second Temple period Jewish settlement regions where plentiful chalk deposits are found, such as the Judean foothills.

The impressively large assemblage of chalk vessels from Jaffa suggests the existence of a sizeable Jewish population in Jaffa during the Early Roman period, and to the important role that the observance of ritual purity laws played in the everyday life of Jaffa's Jewish residents during this period.

14.3.1. Large Lathe-Turned Vessels

Jars

Numerous fragments of stone jars have been uncovered in the Jaffa excavations, all of which were found in Area C. The jars represented in the Jaffa assemblage belong to a well-known type of large, barrel-shaped vessel found in large numbers in Jerusalem, and sporadically at a limited number of sites located throughout the country (cf. Magen 2002:80–90). These vessels were fashioned externally on a large lathe from a sizable block of chalk, and hand-carved internally (Magen 2002:130–131; Gibson 2003:299–300; Amit, Seligman, and Zilberbod 2008:325–330). It has been suggested that this vessel type was used for the storage of some kind of fluid, probably water (Reich 2003:266).

This vessel type has been identified with the *kallal* (קלל) vessel mentioned in Mishnaic literature ('Eduyot 7:5; Ohalot 11:9; Parah 3:3; Tosefta 'Ohalot 7:11; see: Avigad 1983:174; Magen 2002:88; Reich 2003:267), although this identification is problematic (Adler 2011:210–212). This vessel type has also been identified with the large stone jars (λίθιναι ὑδρίαί) mentioned in the New Testament account of the wedding episode at Cana (John 2:6; cf. Deines 1993:34–38, 53).

The finds from Jaffa include numerous rim fragments, body fragments, and base fragments. The rim fragments bear either a triple-ridged profile (22) or a triangular profile (23), and are otherwise unornamented. Ornate chip-carved decoration displaying slightly different variations of a vertical fluted motif were found on body fragments deriving from five distinct vessels, four of which are presented in the current corpus (24–27). Until now, similarly decorated jar fragments have been known only from Jerusalem; parallels have been found in the City of David (Weill 1920, pl. XXVB; Macalister and Duncan 1926:148–150, figs. 138–139;

Crowfoot and Fitzgerald 1929, pl. XVIII:24, 28, 30; Cahill 1992:208, fig. 19:4–7, photo 186; Amit and Adler 2007:76, pl. 6; 219–222), near the Temple Mount (Magen 2002:86, fig. 3.41, 7), in the Jewish Quarter excavations (Magen 2002, pl. 13), and in Akeldama (Dussaud 1912:57–58, no. 56). It is reasonable to assume that jars embellished with such elegant, intricate and labor-intensive ornamentation were quite expensive, and the presence of such a large concentration of these opulent vessels in one house would seem to indicate an upper-class milieu.

In addition to rim and body fragments, four fragments of jar bases were found. These trumpet-shaped bases were externally lathe-cut, and display lathe-incised decorative bands. Rough chisel-marks found on the hollowed-out underside of the bases indicate that they were hand carved internally. One well preserved base displays a particularly ornate triple-grooved band of lathe-incised lines ringing the top of the base (28). Parallels are known from the City of David (Cahill 1992, fig. 19:9), the Temple Mount excavations (Magen 2002, figs. 3.34:1–2, 3.35, 3.36), the Jewish Quarter (Reich 2003, pl. 8.2:14; Geva 2006:223, pl. 9.2:9) and elsewhere.

In view of the presumably high costs involved in their production and transportation, it has been suggested that stone jars should be viewed as luxury items and indicators of a high socioeconomic setting (Reed 2003). It should be stressed that the large quantity of jar fragments found in Area C in Jaffa is without precedent for any site outside of Jerusalem. Considering the fact that the raw material for the production of such jars was not available anywhere in the vicinity of Jaffa, these massive vessels must have been transported from quite a distance. As jars decorated with an opulent fluted frieze have until now been found exclusively in Jerusalem, the possibility exists that these vessels were in fact produced in Jerusalem workshops and transported overland to Jaffa. Alternatively, we may speculate a closer provenance for these vessels, perhaps the Judean foothills which abound in chalk deposits. In any event, the large number of both simple and finely ornamented jar fragments found within the relatively limited area of the residence partially excavated in Area C most clearly bespeaks the high socioeconomic standing of the family that resided in this house.

It may be recalled that the ruins of the Early Roman period residence in Area C yielded the well-known Greek inscriptions which mention that a man named Judah served as the *agoranomos* of Jaffa during the reigns of Nerva and Trajan, at the beginning of the 2nd century C.E. In light of this discovery, we may speculate that this house served as the personal residence of the Jewish *agoranomos* of Jaffa. The copious quantity of opulent stone jars found in this house lends credence to the possibility that the proprietor was in fact the Jewish official who held the influential and economically strategic position of the *agoranomos* of Jaffa.

Hole-Mouth Jars

Three rim-fragments of hole-mouth stone jars were uncovered in Area C, two of which are presented in the present corpus (29–30). One example (29) retains the upper portion of the wall of the jar together with a protruding triangular ledge handle. These fragments belonged to a unique vessel with a narrow mouth, a wide biconical body, and a high and narrow cylindrical base. Complete vessels of this type have been found in the Jewish Quarter excavations (Avigad 1983:128, photo 125) and in Qalandiyeh (Magen 2004:94, fig. 124, pl. 12:10). Fragments similar to those found in Jaffa have been found in Herodium (Loffreda 1996:128, fig. 57:169–170). Although generally smaller than the large jar discussed above, these vessels were apparently also fashioned externally on a large lathe and were internally hand-carved. This relatively rare vessel type may have been used for diluting and poring wine, as can be inferred from its narrow base, which made it possible to tilt the vessel laterally (Magen 2002:90).

14.3.2. Small Lathe-Turned Vessels

Bowls

Various types of lathe-turned chalk bowls are presented in the current corpus, virtually all of which derive from Area C. Magen has noted a marked similarity between these bowls and contemporary lathe-turned wooden bowls discovered in the Judean Desert (Magen 2002:65–71).

Bowl Type 1 is a shallow bowl characterized by sloping walls, a disc or ring base, and a flattened or slightly everted rim (31–36). Incised, lathe-cut lines adorn the exterior wall of these bowls below the rim. Parallels have been discovered near the Temple Mount (Magen 2002:68, figs. 3.5:8–9, 3.9), in the City of David (Cahill 1992:201, fig. 15:4–6, photos 122–123), and at various other sites (cf. Magen 2002:68). This bowl type resembles wooden lathe-turned bowls discovered in the Bar Kokhba period Cave of the Letters in the Judean Desert (Yadin 1963:128, fig. 50:9–10, pl. 39:9–10).

Bowl Type 2 is a large shallow bowl, with slightly everted wall, and a sloped interior. Lathe-incised lines decorate the exterior. One fragment of this bowl type was found in Area C (37). A close parallel to this bowl fragment has been found in the City of David (Cahill 1992:2002, fig. 15:23–24, photos 128–129). At the Temple Mount excavations, a similar bowl fragment with a partially preserved leg apparently served as a mortar bowl (Magen 2002:69, figs. 3.11:2, 3.12, pl. 11). Conjecturally, the Jaffa bowl fragment may have belonged to a similarly footed mortar bowl.

Bowl Type 3 is a shallow bowl characterized by straight or slightly concave wall, and a low disc base (nos. 38–41). One bowl in the Jaffa corpus (42) is a variant of this type, with wall rounded near the base. Parallels of this bowl type have been discovered near the Temple Mount (Magen 2002:66, figs. 3.5:1–7, 3.6–3.8, Pl. 11), in the City of David (Cahill 1992:201–202, fig. 15:9–22, photos 126–127), and at numerous other sites (cf. Magen 2002:66). This bowl type resembles wooden lathe-turned bowls discovered at Masada (Sitry 2006, pls. 17:61, 19:66, 67, 71, 72) and at Qumran (Sitry 2006, pl. 18:63).

Bowl Type 4 features a low disc base, a spherical body, and a slightly inverted rim (43–48). Most of the bowls of this type were found in Area C, although one bowl (not presented in the current corpus) derived from Area A. This bowl type has numerous parallels from excavations in Jerusalem and elsewhere (cf. Cahill 1992:202–203; Magen 2002:69–70). A lathe-turned wooden bowl identical in form to this type of stone bowl was found in Cave 1 at Wadi Murabba‘at (de Vaux 1961:41, pl. X:13), and an additional one, presumably deriving from the Wadi Murabba‘at caves as well, was bought from an antiquities dealer (de Vaux 1961:41, pl. X:15). A similar lathe-turned bowl fashioned from acacia wood was found in the Cave of Letters (Yadin 1963:128, fig. 50:14, pl. 39:14), and additional wooden bowls of this type were found in Masada, ‘En Gedi, and Nahal Hever (Sitry 2006, pls. 29–32). Recently, a wooden bowl of this type has been uncovered at Magdala (de Luca 2009:392, fig. 139).

Bowl Type 5 is a deep bowl with straight or slightly contoured wall, and a flat base (49–55). Vessels of this type are generally wider than they are deep, and as such should technically be termed “bowls,” although Magen refers to these vessels as “cups” (Magen 2002:24, 71). The external wall of these bowls display varying numbers of decorative, lathe-incised lines. Parallels have been found in Jerusalem and at a number of sites in Judea (cf. Cahill 1992:203; Magen 2002:71). A lathe-turned wooden bowl identical in form has been found in Cave 2 at Wadi Murabba‘at (de Vaux 1961:41, pl. X:14).

Bowl Type 6 is a deep bowl, with an outwardly slanting profiled rim, undercut by deep lathe-incised decorative bands (56). Parallels have been found in the Jewish Quarter excavations (Avigad 1983:175, photo 197) and in the City of David (Cahill 1992:203, fig. 16:17–19, photos 134–135). A wooden parallel of this bowl type has been found at Qumran (Sitry 2006, pl. 25:104).

Stoppers

Two lathe-carved chalk stoppers were uncovered in Area C (57–58). Stoppers of this type were apparently used to cover ceramic jugs and flasks, and were not intended to cover chalk vessels which, as a rule, do not have narrow necks and rims (Magen 2002:76). One stopper (57) consists of a round, flat head, with a smaller conical-shaped plug which protrudes from its underside. A shallow lathe-incised groove which encircles the head was apparently meant to hold a cord that helped secure the stopper to the vessel. Stoppers of this type are known mainly from Jerusalem (cf. Magen 2002:77). The second stopper (58) displays a unique stepped profile, with a torus-shaped head, an indented mid-section, and a further indented conical plug protruding from the underside. This design allowed for the use of this stopper with ceramic jug mouths of varying diameters.

It should be noted that according to the tannaitic rabbis, chalk stoppers, unlike the other types of chalk vessels discussed in the present study, did not fulfill any unique role with regard to early rabbinic (tanaaitic) ritual purity law. While chalk stoppers were in fact not susceptible to ritual impurity, for the rabbis this quality

was not unique to stoppers made of stone, as all lids and stoppers were not subject to ritual impurity, irrespective of the raw material from which they were fashioned (Kelim 2:5; Sifra, Shemini:8, 7). On the other hand, a ceramic vessel covered with a stopper made of stone was still apt to contract corpse impurity (Kelim 10:2; cf. Miller 2003:415, *contra* Magen 2002:76–77). From a rabbinic perspective, at least, the choice of chalk as raw material for the making of stoppers would have been based on purely utilitarian motives. Many if not most of these stoppers may have been convenient by-products of the chalk vessel industry, fashioned from the cores extracted from the interior of chalk vessels during production.

14.3.3. Hand-Carved Vessels

Fragments of hand-carved chalk vessels have been found at over 200 sites throughout Judea, Galilee, the Golan and Peræa (in Transjordan). Unlike their lathe-turned counterparts, these vessels display a distinctive faceted appearance formed by the chisel-marks left over from their production process. Vessels fashioned with this technique display a variety of forms, *inter alia*, mugs, small pitchers, bowls, and basins. In Jaffa, over one hundred fragments of hand-carved chalk vessels were found in Area C, and nine fragments in Area A. The group of hand-carved vessel types represented in the Jaffa assemblage can be categorized into a number of sub-groups.

Mugs/Small Pitchers

This group consists of cylindrical containers, with a straight rim, relatively straight wall, and a flat base. The wall of these vessels is relatively thin (generally less than one cm), and as a rule the height of the vessel exceeds the diameter. All of the vessels in this group were fitted with either one or two handles in the form of rectangular projections with a round hole drilled through the center. The volume of the vessels in this group varies widely, from as small as ca. 20 ml to as large as ca. 1000 ml. While the external wall of these vessels was always hand-carved with a chisel, two methods have been discerned for the fashioning of the interior: hand-chiseling, and the removal of the inner core on a lathe. The former method was used in the production centers in the Jerusalem region, while the latter was used in the Galilean workshops (Gal 1991; Magen 2002:118; Amit 2010). The vessels in the Jaffa assemblage show signs of having been internally hand-chiseled.

This group of vessels consists of two typologically and functionally distinct vessel types: mugs, with a plain rim and either a single handle or two opposing handles, and small pitchers, fitted with an open spout protruding from the rim, placed at a 90° angle clockwise from a single handle. This classification can be determined only when dealing with complete vessels or with fragments which retain remnants of either two opposing handles (mug), a spout (pitcher), or a single handle together with the portion of the rim located at a 90° angle clockwise from the handle (mug). Since most fragments are not sufficiently intact to allow for such a classification, these vessel fragments are commonly treated as a single group. As a general rule, however, the smaller vessels in this group (with a capacity of less than 400 ml) are pitchers, while the larger vessels (with a capacity larger than 600 ml) are mugs (cf. Reich 2007a:Tables 5, 6, 7). Dozens of mug/pitcher fragments were uncovered in Area C, including fragments of rims, walls, handles and bases (representative examples appear in Figure 4). Many of these fragments display traces of burning, apparently evidence of a violent conflagration.

One nearly complete vessel, with two opposing handles, can be positively identified as a mug (59). Seven well-preserved vessels with capacities exceeding 600 ml should also be identified as mugs (60–66).

One unusual example (67) is embellished with an incised ornamental band encircling the upper third of the vessel. This roughly executed band consists of four parallel lines incised with a sharp implement, with small semi-circular incisions placed at regular intervals creating a wave-like effect. This band is framed by two roughly parallel incised lines above, and one incised line below. An additional incised line encircles the wall of the vessel close to its base. This decorative band may have been intended to imitate the incised bands found on contemporary lathe-turned chalk bowls. No handles have survived on this vessel.

Two partially complete vessels, fitted with a spouted rim, can be identified as small pitchers (68–69). A fragment of an open spout (70) apparently belonged to another small pitcher.

Although these vessels are commonly referred to as “measuring cups,” researchers have long rejected this term (cf. Magen 2002:99), and an empirical study published by Reich has shown that these vessels were in fact never used as measuring devices (2007a). In this study, Reich measured the volume of 42 complete vessels from Masada and the Jewish Quarter, and found no correlation between the capacities held by these vessels and any known or conjectured measuring systems.

Following the methodology used in Reich’s metrological study, five nearly complete mugs from the Jaffa assemblage were measured. After missing portions of the vessels were reconstructed with clay and crevices sealed, the mugs were filled with water, and the water was subsequently measured in order to determine the capacity of the vessels. The results are presented below in Table 1.

No.	External Base Diam. (cm)	External Height (cm)	Volume (cc)
59	9.5	12	750
60	9	13.5	775
62	9	13.5	730
63	9.5	13.5	780
67	8.5	13	700

Table 14.1. Mug measurements.

The volumes of the five mugs examined in this study are not uniform, and do not appear to correlate with any known or conjectured system of measurement. While an earlier study by A. Ben-David had proposed that the volume of chalk mugs was based on a standard of ca. 540 cc and its mathematical derivatives and that these vessels functioned as measuring cups (Ben-David 1969), none of the mugs from the Jaffa assemblage examined in the present study had a capacity which can be associated with this or any other metrological standard. The present study thus provides a quantitative supplement to Reich’s metrological study of the mugs from Masada and the Jewish Quarter excavations, and supports his conclusions that these vessels did not function as measuring devices.

Bowls

This group consists of hand-carved bowls produced using the same chisel-work technique used in the production of mug/pitchers, and displaying the same distinctive faceted appearance. These bowls have a flat rim, straight or slightly everted side, and a flat base which can often be quite thick. Two complete bowls of this type were found in Area C, one round (71) and the second rectangular with rounded corners (72). Both of these vessels display flat ledge-handles which protrude from the rim, as does a fragment from an additional bowl of this type (73). Two additional bowl fragments (not presented in the current corpus) were found in Area A. Parallels are known from numerous sites throughout the country (cf. Magen 2002:100).

A fragment of what appears to have been part of the base and wall of a large, round chalk bowl was found in Area C (74). The exterior surface retains the rough chisel-marks distinctive of hand-carved chalk vessels, and the interior is roughly worked. The diameter of the vessel measures 16 cm, the base is 6 cm thick, and the thickness of the wall measures 2.5 cm. The massive and coarsely worked features on this object suggest that it may be a fragment of an unfinished bowl.

Volume Measuring Device

A fragment of an unusual rectangular chalk object framed by a low rim, with the stump of a conical protrusion extending from its center, was uncovered in Area C (75). A similarly shaped but unfinished object found in the excavations carried out in the chalk vessel production cave on Mt. Scopus, Jerusalem, had been tentatively identified as a lid for a rectangular vessel (Amit, Seligman, and Zilberbod 2008:339, fig. 20.16:5). However, subsequently published data on comparable material have allowed us to confidently identify the objects from both Mt. Scopus and Jaffa as measuring devices.

The final report on the excavations conducted by Nahman Avigad in Area B of the Jewish Quarter of Jerusalem (the “Burnt House”) presents details of a unique vessel carved from a large block of chalk (Geva

2010:178, pl. 15.14:2). It consists of an elongated rectangular top (34×17.5 cm; height: 11 cm), while the underside is V shaped (in section). Cut into the top is a row of three funnel-like conical cavities of almost identical size (avg. diam.: 9 cm, avg. depth: 7.5 cm) with a drilled perforation (diam.: 1 cm) at the bottom of each. A small fragment of an additional vessel of this type was also uncovered in Area A of Avigad's excavations (Reich 2003:268–269, pl. 8.3:10). Parts of two adjacent conical cavities can be discerned on this fragment, apparently identical in size (avg. diam.: ca. 9 cm, max. depth: ca. 7.5 cm), and with dimensions similar, or even identical, to those found in the object from the Burnt House. An almost intact chalk measuring device of this type was recently discovered in excavations at Shu'afat, a site located northwest of Jerusalem and dated to the post-70 CE interwar period (Reich, Amit, and Bar-Nathan 2014: 63). Rectangular in outline (30 × 46 cm), the device has rounded corners and a raised rim all around. The surface is divided into three rectangular units (each ca. 13×25 cm) separated by two raised dividers that cross the surface of the device widthwise. Within each unit is a funnel-shaped conical cavity. The upper rims of the cavities protrude slightly above the surface of the device. Each cavity has a perforation at the bottom measuring approximately 1 cm in diameter. The cavities were measured with dry sand and found to have the following volumes: 370 cm³ for the central cavity, and 270 cm³ and 250 cm³ for each of the side cavities.

A similar complete vessel used for measuring volume and dating to the Hellenistic period was discovered at Maresha (Finkielsztejn 1999; 2010). This is a rectangular chalk slab decorated with carved lion heads, with four funnel-shaped cavities of various sizes carved into the top as a row arranged according to size from the largest to the smallest. A Greek inscription carved on the side of the object cites the year and the names of two *agoranomoi*, magistrates responsible for overseeing the activities of the local marketplace.

The main difference between the vessels from Shu'afat and Maresha (as well as similar vessels found in Delos and other sites in the Greek world; for bibliographic details see: Finkielsztejn 1999; 2010) and the two vessels from the Jewish Quarter is that in the latter the cavities are of identical or almost identical size. Despite this difference, it is likely that all of the vessels under discussion were used for measuring volume (Reich, Amit, and Bar-Nathan 2014).

It cannot be determined if the vessel from Mt. Scopus, apparently broken during manufacture and thrown away as industrial waste before ever having been used, was intended to be of the Jewish Quarter type (with funnels of identical volume) or of the Shu'afat and Maresha type (with funnels of various volumes). Similarly, although the vessel found at Jaffa was actually put into use, we cannot reconstruct its original appearance due to the fact that only a small fragment of one funnel has survived. It is significant, however, that in the same mansion complex in Area C where this vessel was discovered, a stone mold for casting lead weights with a Greek inscription naming Judah “the *agoranomos* of Jaffa” was also found, strengthening our conclusion that in fact this fragment derives from a device used for measuring volumes.

Early rabbinic literature attests to the existence of similar vessels, although not necessarily of made of stone, which were used to measure different volumes:

The half quarter-[log measure] does not become impure. If the half quarter-[log measure] becomes impure, the quarter-[log measure] does not become impure. They said before Rabbi Aqiba: “Since the half quarter-[log measure] is the exterior of the quarter-[log measure], does it not follow that a vessel whose interior has become unclean, its exterior becomes impure as well?” (Kelim 25:4).

It is of interest to note the explanation of this passage given by the medieval commentator, Rabbi Obadiah of Bertinoro (*ad loc.*):

For example, a thick and elongated slab of wood into which are carved two measures, one beside the other, where one holds the volume of a quarter-log while the second holds the volume of half a quarter-log, and a partition separates between the two.

In order to use such measuring devices, the holes at the base of the funnels would have been plugged, after which liquids could be poured into the cavities. This would have been accomplished by using either an appropriate stopper or even a finger.¹⁰⁷

¹⁰⁷ Cf. Kelim 2:4, and Rabbi Obadiah of Bertinoro (*ad loc.*); Kelim 3:8.

Double Perforated Disc

This is a small disc with two holes pierced near the center (76). Two double perforated ceramic discs found in Gamla of similar shape and dimensions have been identified as a weaving tablets used to secure warp threads (Cassuto 2016:276–277 fig. 17.8).¹⁰⁸ It is also possible that this object served as a stopper which could be tied to the opening of some kind of container, as a button, or perhaps even as a toy.

Tabletop

An almost complete round tabletop made of bituminous chalk was uncovered in Area C (77). It has a sharply tapered profile, with a surface diameter measuring 53 cm, an underside diameter measuring 49.3 cm, and a thickness of 3.2 cm. The surface of the tabletop is finely smoothed and polished, while the underside and tapered sides are scarred with rough chisel-marks. The underside bears three elongated depressions set at 120° angles to one another and which were apparently intended as sockets for receiving the upper portions of wooden legs. These depressions lead into a circular depression which was carved into the center of the underside of the tabletop, and which apparently also aided in securing it to its supporting legs. Lead solders which protrude slightly from both the upper surface and the underside of the tabletop indicate that the table had cracked and was repaired during the course of its use.

Complete tabletops of this type, with similar dimensions, have been found in the Jewish Quarter excavations (Avigad 1983:168–169, photo 188), and comparable tabletop fragments have been found in the City of David (Cahill 1992:215, Fig. 21:6–11, photos 211–213) and in the excavations at the foot of the Temple Mount (Magen 2002:96–97, figs. 3.58–3.59). Like the table from Jaffa, the tables from the Jewish Quarter also have three sockets for holding wooden legs, while the table from the Temple Mount excavations has been reconstructed as having had six sockets, with alternating large and small sockets set at 60° angles from one another.

The rough chisel marks on the edge of the tabletop from Jaffa clearly indicate that this tabletop was hand-carved. The tabletop fragment found in the Temple Mount excavations bears a stepped profile, and according to Magen it was fashioned on a lathe (Magen 2002:96). The tabletop fragment found in the City of David displays a similarly stepped profile, however Cahill was less than secure in her assessment that it was lathe-cut (Cahill 1992:215).

Although the legs of these tabletops have not been preserved, Avigad has suggested that their shape, in the form of animal legs, may be reconstructed on the basis of depictions on Hellenistic and Roman artwork (Avigad 1983:168–170), and that these round tripod tables should be identified with the *delphica mensa* mentioned in the early rabbinic sources (‘Avodah Zarah 5:5; Kelim 22:1–2; 24:6; 25:1; Tosefta Kelim BM 6:7). Meshorer has suggested that a graphic representation appearing on the reverse of one of a series of coins minted during the reign of Herod should be identified as a tripod table of this type (Meshorer 2001:66–67).

According to early rabbinic law, tables made of wood or metal were susceptible to ritual impurity (Kelim 22:2; Tosefta Kelim BM 4:1; 6:7), while stone tables were impervious to ritual impurity (Kelim 22:1; Tosefta Kelim BB 1:10; JT Berakhot 12a). Stone tables, however, were not a uniquely Jewish phenomenon during this period. They have been unearthed in Delos (Deonna 1938:34–36) and Pompeii (Pernice 1932, pls. 4.1, 5.1–6), and mention of stone tables may be found in contemporary classical literature (Varro, *De lingua Latina* 5:125).

Base of Monopodium Table

The fragment of a round object made of hard chalk with a square indentation in its center (78) has been tentatively identified as the socket-base of a pillar support for a monopodium table. Monopodium bases in the shape of a truncated pyramid with a square depression in the upper and lower sides have been found in the Temple Mount excavations (Magen 2002:110, figs. 3.72:2, 4, 3.73–3.74).

¹⁰⁸ Our thanks are extended to Danny Syon for bringing these finds to our attention.

Large Vessels with Pipe-like Protrusions

A fragment of a round, concave, dish-shaped object, with a hollow, pipe-like projection protruding from the center of the dish above and below (79) was uncovered in Area C. This object was hand-carved from a single block of bituminous chalk. A fragment of a similarly shaped object (80) retains traces of a pipe-like projection protruding from the interior of the vessel. In a similarly shaped vessel discovered at a site in Nahal Yattir and dated to the period between 70 CE and the Bar Kokhba revolt, small diagonal perforations were cut through the pipe-like projection above its joint with the dish, and the utensil was identified as a “stone pressing vessel” (Alon 1983:80; Magen 1988, fig. 18:4). A comparable vessel discovered in Area B of the Avigad excavations in the Jewish Quarter of Jerusalem (the “Burnt House”) displays similar perforations, and the pipe-like protrusion below the vessel ends in a massive base (Geva 2010:177–178, pl. 5.14:1). Geva noted ceramic parallels found in Hellenistic period Maresha, in Masada (dated to the end of the Second Temple period), and in Byzantine period En-Gedi, and suggested that these vessels were used for the storage of precious liquids such as certain types of oil or wine (Geva 2010:178). According to Geva’s suggestion, liquid could have been drawn from the center of these containers using a small vessel (a ladle, ceramic juglet or a stone mug), and after the small vessel had been emptied, it could have been placed upside-down on the dish so that the remainder of the precious liquid could flow back into the container. Although the vessels discovered in Jaffa are fragmentary and no perforations between the outer dish and the interior of the pipe-like protrusions have survived, based on the aforementioned parallels we may presume that such perforations did in fact exist originally, and that perhaps these vessels served as containers for precious liquids in a manner similar to that suggested by Geva.

Deep Vessel

This object, found almost completely intact, is a massive vessel hand-chiseled from a single block of soft chalk (81). This deep vessel has a flat rim, slightly flaring wall, and a flat base with a stepped external profile. It is unclear how it was used.

14.4. Basalt

Grinding Bowls

Numerous objects made of basalt were uncovered in areas A, C, and P. These finds include two complete tripodal shallow grinding-bowls (82–83), and numerous fragments of additional footed grinding-bowls (84–86). One of the complete tripodal grinding bowls (83) bears four ledge handles extending from the rim at 90° angles to one another, a feature known from similar bowls dating to the Herodian Period (Avigad 1983:127, fig. 123).

Shallow grinding-bowls with disc or ring bases were also found (87–88), one of which retains remnants of a horizontal ledge handle (87). Both the tripodal and the disc or ring-based type of grinding bowl were in use for centuries, from the Late Bronze Age through the Byzantine period and perhaps even later.¹⁰⁹

The trumpet base of a large basalt vessel (89), presumably a grinding bowl, was uncovered in Area A.

Pestles

A number of basalt pestles were found in areas A and C, mostly conical-shaped with rounded tops (90).

¹⁰⁹ We thank Rafael Frankel for sharing his expertise on the subject of stone grinding utensils.

Millstones

Millstones of various types are represented in the Jaffa assemblage:

Simple Mill. Fragments of simple millstones were uncovered in Area A, including two fragments of loaf-shaped upper stones, and two fragments of the flat lower portion of simple mills (not published here). The simple quern was the only type of grain-mill in use up until the Persian period, and continued to be used for some time thereafter as well (Frankel 2003a:44).

Pompeian Donkey Mill. A fragment of a *catillus*, the upper portion of a donkey mill, was found in Area A (91). Archaeological evidence has shown that this type of mill was introduced into the country as early as the Hellenistic period (Frankel 2003a:46–47).

Watermill stone. A fragment of the upper portion of a watermill stone (92) was uncovered in Area A. This type of grain-mill is mentioned in the tannaitic literature (Tosefta, Shabbat 1:28; see Frankel 2003a:47–49, 58–59). 6 km north of Jaffa.

Olynthus Mill. Two fragments of upper stones belonging to Olynthus mills (“hopper rubber” mills) were found in Jaffa. One of these fragments (93) displays vertical striations cut into the underside of the stone, a pattern found on Olynthus mills uncovered in Masada, Horvat ‘Aqav, and Horvat ‘Eleq (Frankel 2003b:10, fig 8:a). The second fragment (not illustrated) displays diagonal striations which may have formed part of a herringbone pattern (Frankel 2003b:10, fig 8:d, f). The Olynthus mill was the standard grain-mill in use throughout the country during the Hellenistic and Roman Periods. (A complete and superbly preserved upper stone belonging to an additional Olynthus mill deriving from an unknown context in the environs of Jaffa is presented in the appendix to this chapter).

14.5. Beachrock

Spouted-Rim Bowl

Coarse-grained beachrock was a convenient, locally available substitute for basalt, serving as the raw material for various grinding implements. A fragment of a beachrock bowl, with a spout protruding from its rim, was uncovered in Area A (94). This form of bowl is very similar to the hard chalk bowl (17), a type of grinding bowl found in Hellenistic contexts at a number of sites in Israel, in Delos and in Corinth. Fragments of two large ledge-rim bowls made of beachrock were found in Area C, one moderately deep (95) and the other very shallow (96). These vessels probably also served as grinding bowls. Two fragments of loaf-shaped beachrock objects which served as upper millstones of a simple quern were found in areas A and C.

Scale-Weight

A scale-weight (97), made of fine-grain beachrock, was uncovered in Area A. This weight is almost trapezoidal in section (6 cm base diam., 5 cm upper surface diam., 4 cm height). A round cavity (0.8 cm diam., 0.8 cm depth) was drilled into the base of the weight slightly off-center. It appears that this cavity was originally meant to hold a small mass of lead which was cast inside in order to calibrate the weight. A shallow depression slightly overlapping the cavity on the surface of the weight seems to have been intended to help affix the cast lead to the stone surface of the weight.

Numerous Second Temple period chalk weights with similar cavities have been found in the Jewish Quarter excavations (Reich 2003:270, pl. 8.6:15; 2006:346–347), the Temple Mount excavations (Reich forthc.; 2015:74–85), various other excavations in Jerusalem (Reich 2006:352–358; 2015:37–40), and Masada (Reich 2007b:211). Ten examples from the Jewish Quarter, two examples from the City of David, and two examples from Masada were found with the cast lead *in situ* in the drilled cavity (Reich 2006, Table 18.1, 18.11; 2007b:211). This calibration technique has been found in a small number of Iron Age stone scale-weights as well (Kletter 1998:59–60).

The mass of this scale-weight is 250 gm, however since this measurement does not take into account the assumed lead calibration, it cannot be determined how this mass relates to any known ancient system of measurement.

14.6. Marble

Fragments belonging to a number of different forms of marble vessels were found in the Jaffa assemblage. Two rim fragments of marble bowls, each with a semicircular ledge handle, were uncovered in Area A (98) and Area C (99). A marble bowl fragment consisting of a flat rim, a ledge-handle, and a flat base appears to have been part of a shallow marble grinding bowl (100). Another bowl fragment, decorated with two parallel incisions undercutting a flat rim (101), probably also belonged to a grinding bowl. A plate fragment with a flat and grooved rim, made from yellowish marble with black streaks, was uncovered in Area A (102). A fragment of a large round or oval platter with a flat ledge-rim (103) was found in Area C.

14.7. Alabaster

Fragments belonging to various types of alabaster vessels were found in Area A. These include fragments of alabastra and bowls of various forms.

Alabastra

A round flaring rim fragment belonging to an alabastron (104) appears to be an Egyptian import, and was probably used to contain a costly perfume (Stern 1982:149). Two well dated parallels have been found in Strata VIII–IX in Tel Michal, dating to 450–400 BCE (Clamer 1989:348, fig. 30.1:11–12).

An almost complete alabastron with a flat rim, short neck, a bell-shaped body with small handles and a wide flat base (105) was found in an unknown stratigraphic context in Area A. A close comparison can be found in a pottery version from Gnatia, Italy, dated to the late 4th century BCE (Lanza 2005:84, no. 26).¹¹⁰

Ledge-Rim Bowls

A fragment of a small and shallow ledge-rim bowl with a flat base (106) was apparently used for crushing small quantities of fine aromatic powders; parallels have been dated to the Persian period (cf. Stern 1982:149; Clamer 1989:347–348, fig. 30.1:8) and to a 2nd century BCE context in Tel Beersheba (Derfler 1993:100–101, pl. 24). A disc base fragment (107) may have belonged to a similar bowl type. The form of this bowl type bears a strong similarity to the Persian–Hellenistic hard chalk ledge-rimmed bowls discussed previously, and parallel stone bowls from Persepolis, as well as a group of local ceramic bowls date to the Persian–Early Hellenistic periods, *ca.* 6th–4th centuries BCE (Cahill 1992:193).

Miscellaneous Bowls

One bowl fragments display flat rim and oblique wall, carinated at the bottom (108); a parallel to this alabaster bowl type has been found in Stratum IX in Tel Michal, dated to 450–430 BCE (Clamer 1989:348, fig. 30.1:9). Another bowl fragment consisting of a flat rim, a slightly convex wall, and a flat base (111) apparently also belonged to a cosmetic container; similarly shaped vessels have been dated to Middle Bronze Age II–Late Bronze Age I (Ben-Dor 1945:101–102, fig. B:1, pl. XXII:8; Clamer 1989:345, fig. 30.1:1). An alabaster trumpet-base fragment (112) was also uncovered in Area A. A bowl fragment with a rounded rim (110) was also uncovered.

¹¹⁰ We thank Fabio Colivicchi for kindly assisting us in pointing out this parallel.

14.8. Varia

Glazed Chalk Bowl

This is a large, shallow chalk bowl featuring a flat rim and a ring base (113). The interior and exterior surfaces of this vessel are covered with a green glaze. We are not familiar with any similarly glazed chalk vessels from other sites in the region.

Bead?

This is a small cylindrical object (bead?) made of a light-green, slightly translucent stone (114). The object is decorated with small circular depressions and horizontal lines. This was apparently a decorative object, although its exact function remains unclear.

Echinoderm Fossil (Scale-Weight?)

This is a fossilized echinoderm (115), which may have been used in antiquity as a scale-weight. The fossilized impression on the bottom of this object may have helped insure that the mass of the weight was not tampered with by means of illicit filing.

14.9. Analysis

Hard Chalk Bowls and the Jewish Stone Vessel Industry

As we have seen, the chalk vessel industry that flourished in Jerusalem and other Jewish centers throughout the country during the Early Roman period is a phenomenon that should be understood against the background of Jewish ritual purity laws which regarded stone vessels as impervious to ritual impurity. Stone vessels of this type have been found almost exclusively in Jewish settlements, and the appearance of such vessels at a site is commonly regarded as a clear indicator of a Jewish presence. These Early Roman period vessels differ significantly from the Persian-Hellenistic period hard chalk ledge-rim pedestal bowls that have been presented above, in terms of the raw material from which they were produced (soft chalk), the form of the vessels, and the production techniques adopted in the manufacturing process.

Recently, Reich has proposed that the production of hard chalk bowls signifies the earliest phases of the Jewish stone vessel industry (Reich 2003:265). According to this proposal, these earlier vessels represent the very beginnings of the extensive use of stone vessels, the raw material having been chosen due to its distinctive qualities with regard to Jewish religious regulations concerning ritual purity matters. It follows that these hard chalk bowls, like the later-phase chalk vessels, are a distinctively Jewish phenomenon, and as such the discovery of such vessels at a particular site would seem to indicate a Jewish presence. It should be pointed out that this proposal is based on Reich's contention that these vessels first appeared only in the late 2nd or early 1st century BCE, immediately prior to the appearance of the chalk vessel industry in the Early Roman period, and on his notion (noted above) that such vessels have not been identified at any site outside of Jerusalem (Reich 2003).

As we have seen above, hard chalk bowls in fact appeared as early as the Persian period, and continued to be in use throughout the Hellenistic period. These vessels have been found throughout the country, from Lachish in the south, to Yodfat in the Lower Galilee and Tell Keisan on the Phoenician coast in the north. These finds derive primarily from pagan settlements, and even the vessels from Jerusalem may be attributed to the gentile or Hellenized elements which are known to have resided in the city during this period. There is no indication that these hard chalk vessels were produced primarily, or even tangentially, for purposes related to Jewish ritual purity laws. As such, these vessels should be viewed as a phenomenon distinct from the chalk vessel industry of the Early Roman period, and not as representative of an early phase of this industry.

This having been said, we may suggest that the Persian–Hellenistic period hard chalk bowls served as technological prototypes for the Early Roman period chalk vessel industry. A tradition of stone vessel workmanship, developed over the course of centuries, laid the groundwork for the rise of the large-scale chalk vessel production centers of the Early Roman period. While the earlier hard chalk vessels enjoyed a broad geographic distribution throughout the country, the quantity of vessels produced was small and the repertoire limited. These were apparently luxury vessels which fulfilled quite a different function than that of domestic stone vessels used on an everyday basis in the Early Roman period. When the evolution of Jewish ritual purity law brought about an acute need for stone tableware and common domestic stone vessels on a large scale, Jewish artisans engaged in the production of a new class of stone ware were able to benefit from the technological experience garnered over the course of generations in the stone vessel workshops of the Persian and Hellenistic periods. The growing demand for stone vessels in the Jewish market necessitated mass production techniques, bringing about the introduction of new lathe-manufacturing technologies, and a modification in the choice of raw material from hard chalk to soft chalk.

The Stone Vessels of Jaffa as an Ethno-Religious Indicator

As we have seen above, all of the hard chalk vessels from the Jaffa assemblage are attributable to the Persian and Hellenistic periods of settlement at the site. The incidence of hard chalk vessels in Jaffa during these periods should not be viewed as indicative of a Jewish presence in the city at this time. During the Persian period, Jaffa was a Phoenician city under Sidonian control. The establishment of a Sidonian temple in Jaffa during this period attests to the pagan character of the Phoenician city. During the Hellenistic period, Jaffa was a Greek city, and remained so until its annexation by the Hasmonean ruler Simon *circa* 140 BCE (I Maccabees 14:5). The only reference to any Jewish presence at Jaffa prior to its capture by the Hasmoneans is found in connection with an account of the massacre of 200 Jewish inhabitants of Jaffa at the hands of the Greek citizens of the city in the middle of the 2nd century BCE (II Maccabees 12:3–4). The presence of hard chalk vessels at Jaffa does nothing to affect this picture of a pagan coastal city with a negligible Jewish population, at most, during the Persian and Hellenistic periods.

On the other hand, the large quantity and rich repertoire of soft chalk vessels represented in the Early Roman period assemblage in Jaffa provides clear material corroboration of the historical sources that describe a strong Jewish presence in the city during that period. The stone vessel assemblage found in the residence excavated in Area C bears a striking resemblance to the assemblages discovered in contemporary residences in the Upper City of Jerusalem. Vessel types which have hitherto been unknown from sites anywhere outside of Jerusalem, such as the round tripodal stone table and the ornately decorated stone jars, appear prominently in the stone vessel assemblage found in the partially excavated house in Area C. These finds are indicative of the central role which ritual purity law played in the daily lives of the residents of this Jaffa estate, and allude to a close cultural association between Jaffa and Jerusalem during the 1st century C.E.

The ceramic and epigraphic evidence indicates that the building in Area C continued to be occupied by Jewish residents for some time after 70 C.E., and as such, the stone vessels discovered here apparently continued to be in use after the suppression of the First Revolt. In both Judea and Galilee, stone vessels have been discovered at a number of sites occupied until the Bar Kokhba revolt (Adler 2017a; 2017b), while in the Galilee, a limited number of stone vessels have been found in contexts dating to as late as the 3rd century C.E. (Amit and Adler 2010). The stone vessel assemblage from Area C in Jaffa constitutes one of the largest and richest collection of chalk vessels attributable to the period between 70–135 CE that has been discovered to date, and sheds new light on the phenomenon of ritual purity observance amongst the Jewish population of Judea in the post-Second Temple era.

Appendix: Upper Stone of An Olynthus Mill from Jaffa's Environs

While sorting through the Classical period stone vessel assemblage from the Jaffa excavations carried out by Jacob Kaplan, in preparation for the publication of this report, the authors came across the upper stone of an

Olynthus mill (“hopper rubber” mill) in the storerooms of the Jaffa Museum of Antiquities. No records indicating the provenance of this millstone were found, however, it appears that it was unearthed in the framework of one of Kaplan’s excavations in Tel-Aviv-Jaffa or its environs (116).

The millstone is made of basalt, and bears a trapezoidal cross-section both widthwise and lengthwise, a prevalent feature of this type of millstone (Frankel 2003b, fig. 4). As such, the upper surface of the millstone (37×30 cm) is smaller than the grinding surface on its underside (40 × 35 cm). The millstone measures 9 cm in thickness. The grain hopper in the center of the stone is roughly rectangular in form, with a trapezoidal cross-section measuring 10–8×13–9.5 cm. Slots for securing the wooden lever are cut into the short side of the upper surface of the millstone, each measuring 10 cm in width.

Although the walls and corners of the millstone have been worn from years of usage, the underside of the millstone retains a particularly prominent striation pattern, an indication that the striations were originally cut quite deeply into the basalt when the millstone was first made. The striation pattern itself bears a close similarity to pattern types m, n, and o according to the typology presented by Frankel (2003b, fig. 8). Parallels of Olynthus millstones displaying this type of striation pattern have been found at sites on the Ramat Menashe region, the Southern Carmel ridge and the Southern Carmel coast, a relatively limited area in the north-central region of the country (Frankel 2003b). To date, no parallels from outside of Israel have been published. The discovery of the present millstone in Jaffa thus extends the recorded distribution area of this millstone type considerably southward.

It should be noted that despite the similarity between the striation pattern on the Jaffa millstone and the above mentioned parallels, certain details on the Jaffa millstone are distinctive. While the lengthwise striations on the millstones found at the northern sites run in a straight line parallel to the length of the stone, the Jaffa millstone displays slightly concave striation lines.

No.	Reg. No.	Area	Type	Description
1	79/X/60/045	X	Bowl	Light pink, ledge rim, flat base
2	79/A/56/015	A	Bowl	Yellowish-pink, ledge-rim, rounded wall
3	79/Y/64/111	Y	Bowl	Light pink, ledge-rim, rounded wall
4	79/A/71/007	A	Bowl	Ledge-rim, rounded wall
5	79/A/74/064	A	Bowl	Yellowish, ledge-rim, rounded wall
6	A/71/B205	A	Bowl	Yellowish-pink, ledge-rim, rounded wall
7	A/71/B85	A	Bowl	Yellowish-pink, ledge-rim, rounded wall
8	79/J/70/097	J	Bowl	Light pink, ledge-rim, rounded wall
9	79/T/61/035	T	Base	Trumpet base, hollow
10	79/A/56/213	A	Base	Trumpet base, hollow
11	79/A/56/016	A	Base	Trumpet base, hollow
12	79/A/74/063	A	Base	Trumpet base, hollow
13	79/A/58/099	A	Bowl	Thicken flattened base
14	79/A/56/018	A	Bowl	Yellowish, flattened rim, disc base
15	79/A/70/004	A	Bowl	Flattened rim, ring base
16	79/A/73/080	A	Cosmetic palette?	Pinkish, rectangular, oval depression on flat upper surface, flattened base
17	79/A/70/010	A	Bowl	Yellowish, flat rim, triangular spout protruding from rim, rounded wall
18	79/C/65/484	C	Bowl	Grooved flattened rim, grooved and pierced ledge handle
19	79/C/61/164	C	Platter	Flattened rim, incisions around interior of rim, curved wall, disc base
20	79/C/61/105	C	Scale-weight	Cylindrical, slightly convex upper and lower surfaces, rounded edges
21	79/C/61/108	C	Pestle	Hour-glass shaped

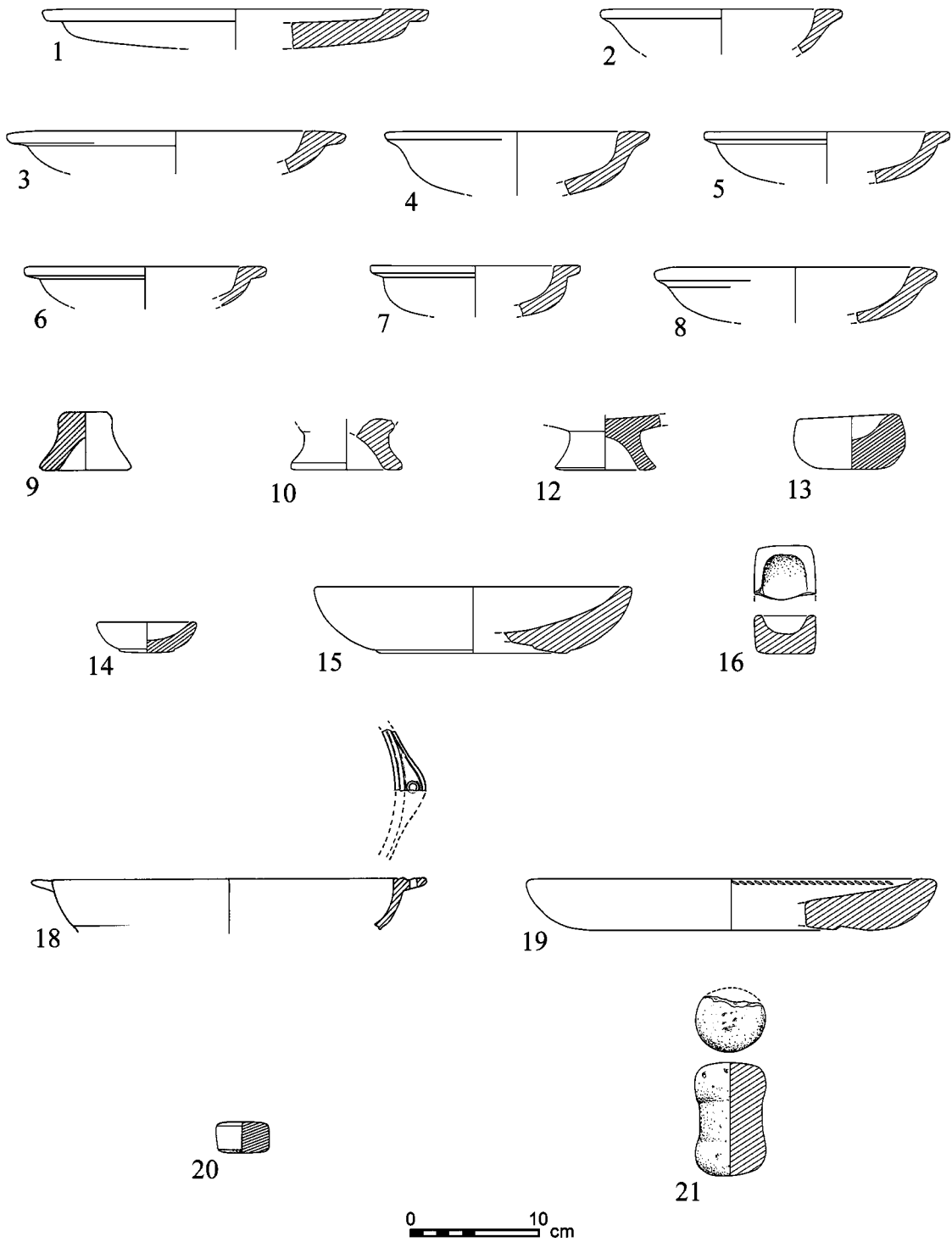


Figure 14.1. Hard Limestone Vessels.

No.	Reg. No.	Area	Type	Description
22	C/61/001	C	Large jar	Triple ridged rim, wall fragment
23	C/61/002	C	Large jar	Triangular rim, wall fragment
24	C/65/B962	C	Large jar	Wall fragment with fluted decoration
25	C/65/B848	C	Large jar	Wall fragment with fluted decoration
26	C/65/B861	C	Large jar	Wall fragment with fluted decoration
27	79/C/65/482	C	Large jar	Wall fragment with fluted decoration
28	79/C/61/169	C	Base of large jar	Lathe-turned exterior, triple-grooved band of lathe-incised lines, roughly chiseled interior
29	79/C/61/172	C	Holemouth jar	Rim, wall fragment with triangular ledge handle
30	C/61/B494	C	Holemouth jar	Rim, wall fragment

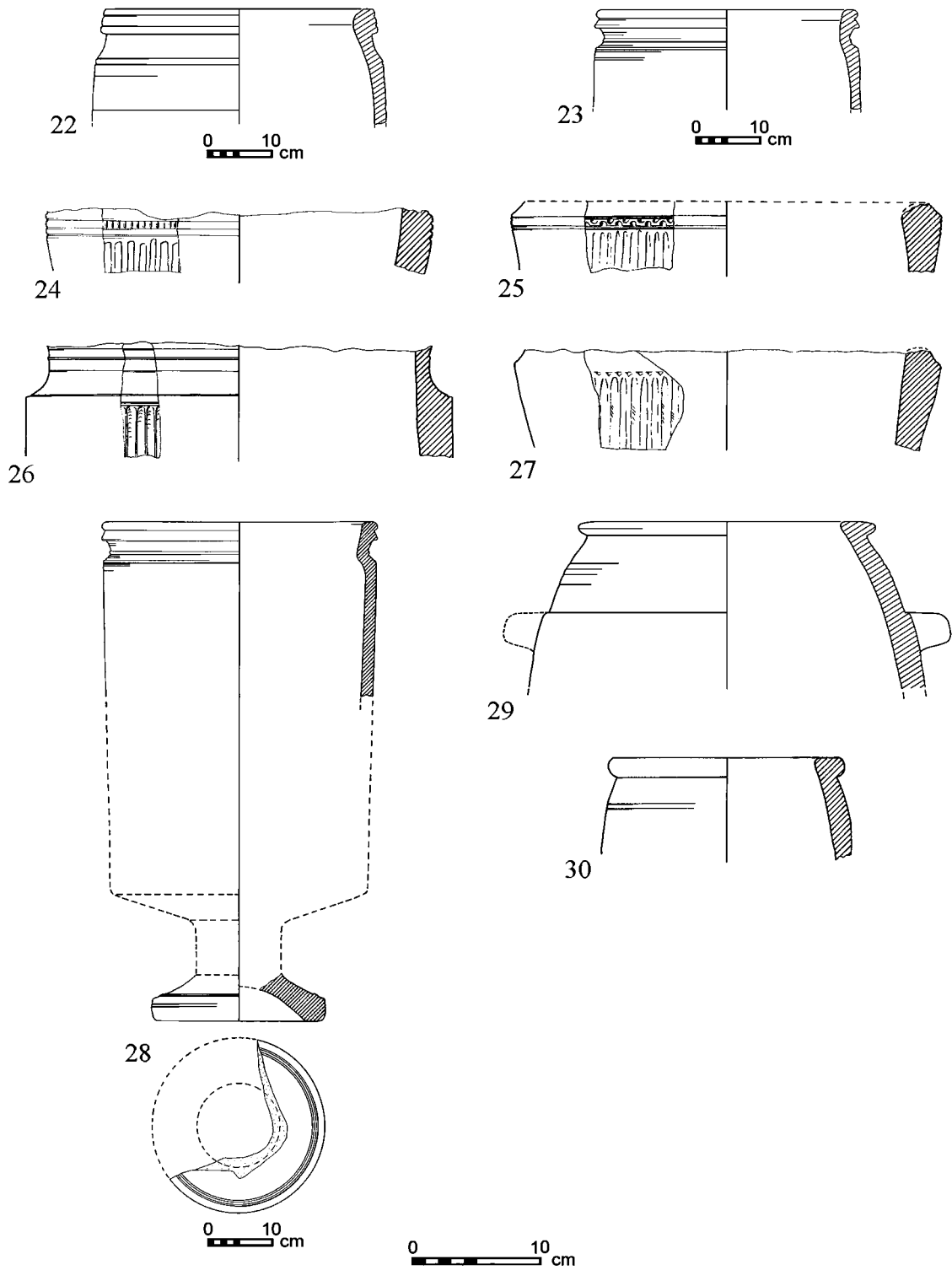


Figure 14.2. Large-Lathe Turned Chalk Vessels.

No.	Reg. No.	Area	Type	Description
31	C/61/003	C	Bowl	Not located in Kaplan collection
32	79/C/65/483	C	Bowl	Incurved rounded rim, lathe-incised lines on interior and exterior beneath rim
33	C/61/B401	C	Bowl	Not located in Kaplan collection
34	79/C/61/160	C	Bowl	Rounded wall, disc base
35	79/C/61/159	C	Bowl	Rounded wall, disc base
36	79/C/61/156	C	Bowl	Disc base
37	C/61/B397	C	Bowl	Large shallow bowl, lathe-incised decorative band
38	C/61/004	C	Bowl	Not located in Kaplan collection
39	C/61/005	C	Bowl	Not located in Kaplan collection
40	79/C/65/478	C	Bowl	Concave wall, lathe-incised line above base, flattened base
41	79/C/61/161	C	Bowl	Concave wall, disc base
42	79/C/61/147	C	Bowl	Nearly intact, flat rim, lathed incised lines on wall, slightly rounded near base, disc base
43	C/61/B398	C	Bowl	Incurved rim, spheroid body
44	C/61/B248	C	Bowl	Incurved rim, spheroid body
45	79/C/61/149	C	Bowl	Spheroid body, flattened pedestal base
46	79/C/61/151	C	Bowl	Flattened pedestal base
47	79/C/61/152	C	Bowl	Disc base
48	79/C/61/155	C	Bowl	Disc base, wall fragment, traces of burning
49	79/C/61/143		Bowl	Not located in Kaplan collection
50	C/62/B721	C	Bowl	Nearly intact, slightly concave wall, lathed incised lines on wall, flat base
51	C/61/B459	C	Bowl	Slightly concave wall, lathed incised lines
52	C/61/B867		Bowl	Not located in Kaplan collection
53	79/C/61/144	C	Bowl	Cylindrical body, lathe-incised lines, flattened base, traces of burning
54	C/61/B27		Bowl	Not located in Kaplan collection
55	79/C/61/142	C	Bowl	Broad body narrowing toward base, disc base, traces of burning
56	C/65/001	C	Bowl	Not located in Kaplan collection
57	79/C/65/487	C	Stopper	Chalk, circular, flattened top, groove at midriff, flattened underside with conical projection
58	79/C/61/109	C	Stopper	Chalk, stepped circular top, broad conical projection from underside

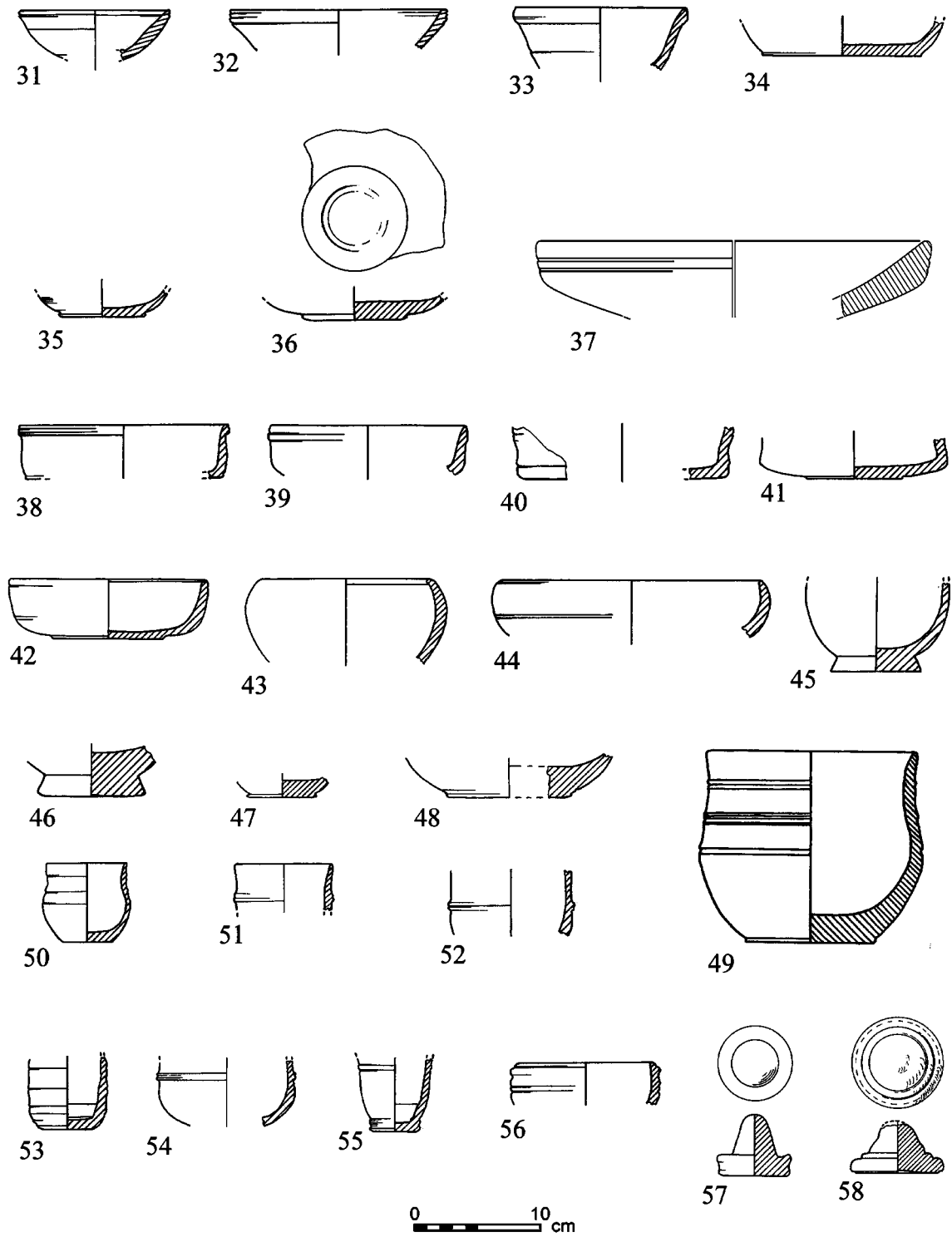


Figure 14.3. Small-Lathe Turned Chalk Bowls.

No.	Reg. No.	Area	Type	Description
59	79/C/65/460	C	Mug	Nearly complete vessel, two opposing handles
60	79/C/61/115	C	Mug	Nearly complete vessel, two opposing handles?
61	79/C/61/117	C	Mug	Rim, wall, handle, base
62	79/C/61/114	C	Mug	Nearly complete vessel, two opposing handles?
63	79/C/65/461	C	Mug	Nearly complete vessel, two opposing handles? traces of burning
64	79/C/61/116	C	Mug	Wall, handle, base, traces of burning
65	79/C/65/463	C	Mug	Rim, wall, handle, base
66	79/C/65/462	C	Mug	Nearly complete vessel, two opposing handles?
67	79/C/61/148	C	Mug	Nearly complete vessel, two opposing handles? hor- izontal incisions and dots hand carved on upper third, horizontal incision near base
68	79/C/61/141	C	Small pitcher	Spouted rim, wall, base
69	C/61/B659	C	Small pitcher	Not located in Kaplan collection
70	79/C/65/486	C	Small pitcher	Spouted rim
71	79/C/61/145	C	Bowl	Circular, flattened rim, vertical wall, flattened base, two horizontal ledge handles from rim
72	79/C/61/146	C	Bowl	Ellipsoid, flattened rim, two opposing lug handles from rim, curved wall, flattened base
73	C/61/B709	C	Bowl	Flat rim with lug handle, wall

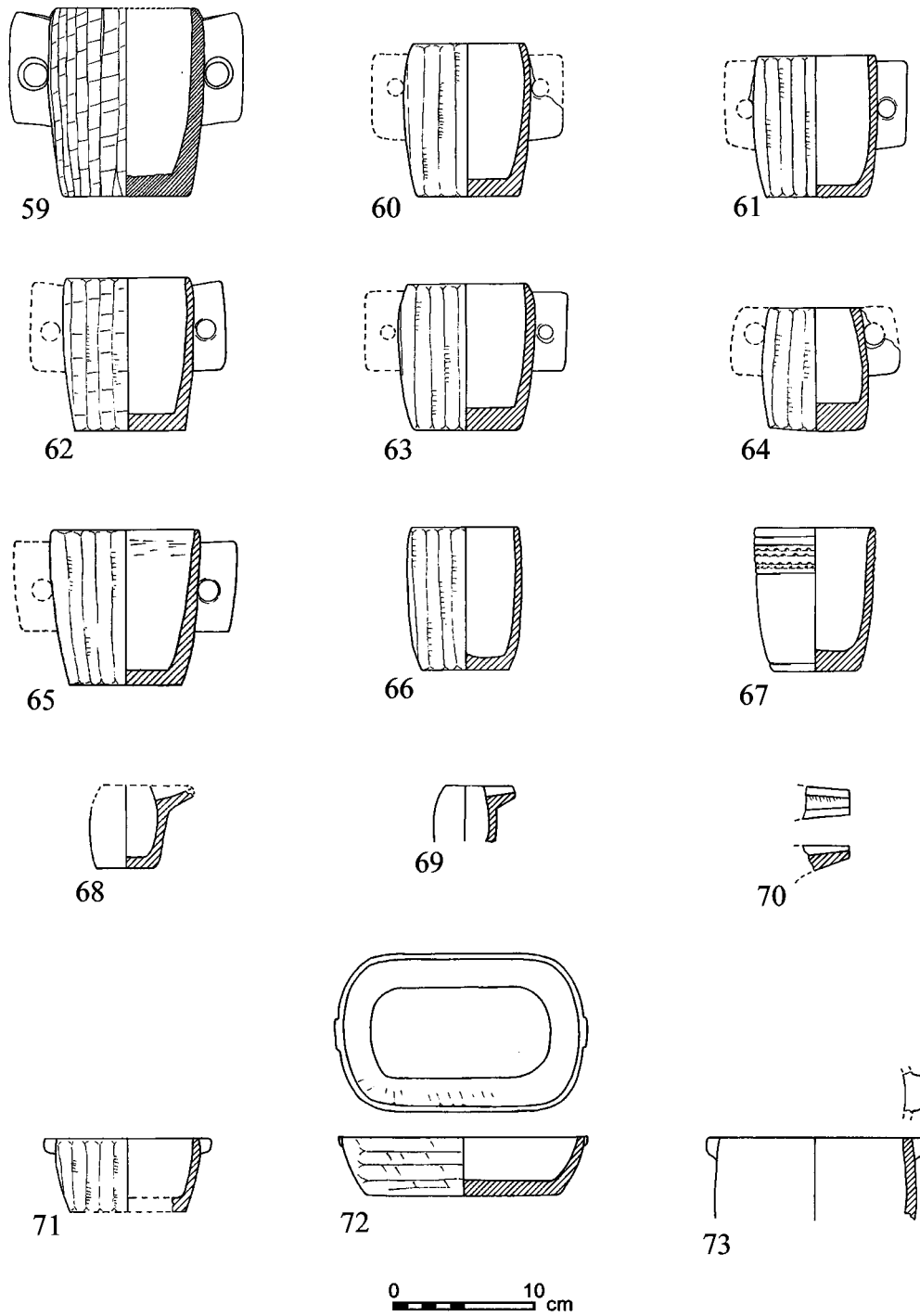


Figure 14.4. Hand-Carved Chalk Mugs, Pitchers and Bowls.

No.	Reg. No.	Area	Type	Description
74	C/61/B366	C	Unfinished bowl?	Fragment of base and wall
75	79/C/61/166	C	Volume Measuring Device	Rectangular, slightly downsloping top, protrusion from centre, flattened protruding base
76	79/C/65/488	C	Weaving tablet	Flat disc, two holes
77	79/C/61/443	C	Table	Round polished upper faC.E., chisel-scarred tapering wall, chisel scarred underside, three grooves on underside leading into circular indentation
78	C/61/B170	C	Base of table?	round, with square indentation
79	79/C/61/167	C	Jar with collar	Large, dish-shaped, cylindrical pipe projecting from centre above and below
80	79/C/61/168	C	Jar with collar	Large, dish-shaped, rounded base, traces of a pipe projecting from centre above
81	79/F/56/298	F	Deep vessel	Flat rim, slightly everted wall, deep interior

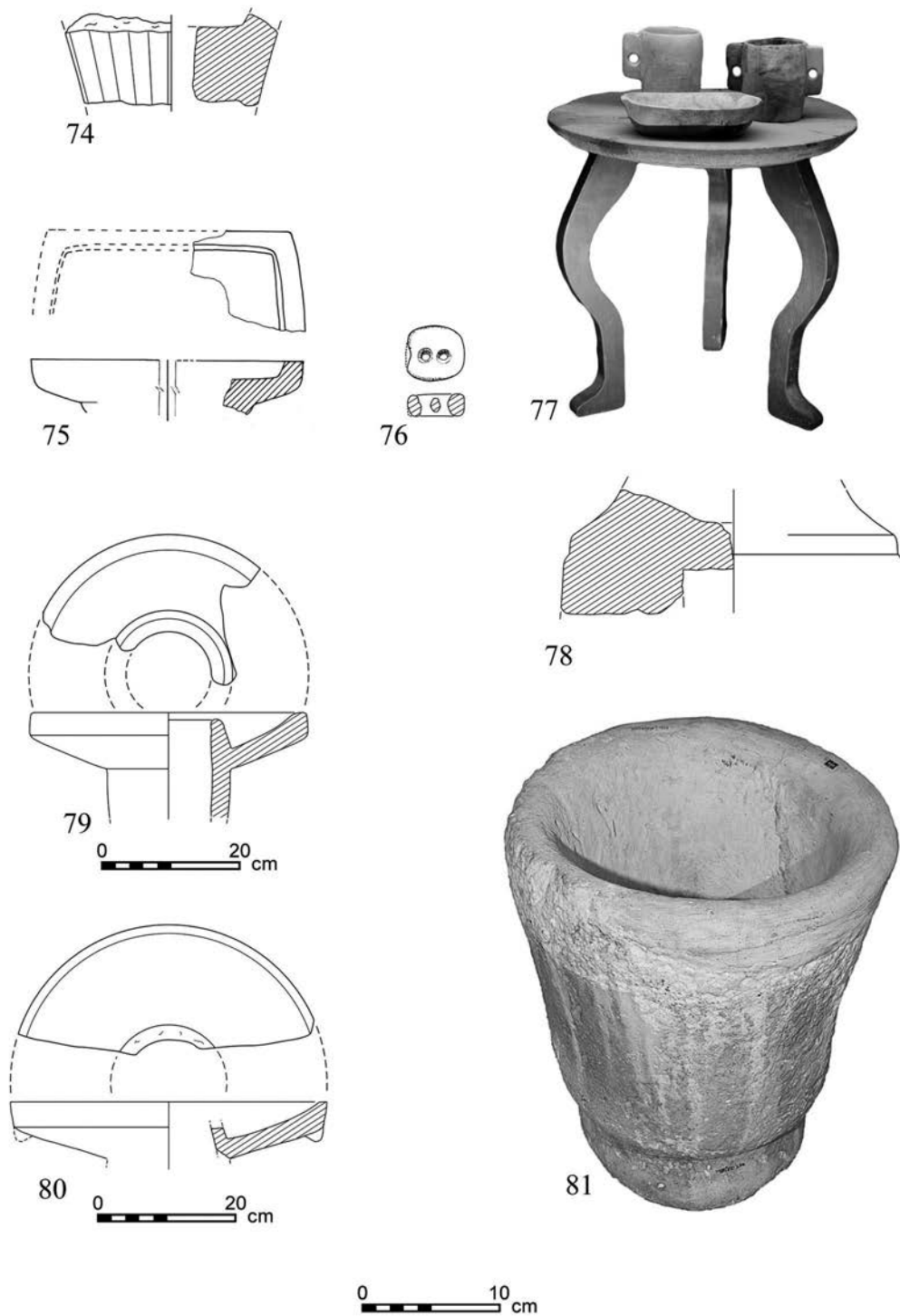


Figure 14.5. Various Hand-Carved Chalk Vessels.

No.	Reg. No.	Area	Type	Description
82	79/C/61/097	C	Footed grinding bowl	Rounded rim, shallow interior, tripodal base
83	79/P/82/007	P	Footed grinding bowl	Rounded rim, four ledge handles, shallow interior, tripodal base
84	79/A/56/211	A	Footed grinding bowl	Rounded rim, shallow interior, footed base
85	79/C/65/493	C	Footed grinding bowl	Rounded rim, shallow interior, footed base
86	79/C/61/098	C	Footed grinding bowl	Rounded rim, shallow interior, footed base
87	79/C/65/489	C	Grinding bowl	Incurved rounded rim, rounded base, groove near base, trace of horizontal ledge handle
88	79/C/65/492		Grinding bowl	Rounded rim, shallow interior, ring or disc base
89	79/A/56/005	A	Trumpet base	Hollow trumpet base
90	79/A/56/004	A	Pestle	Conical, rounded top, flattened base
91	79/C/61/458	C	Donkey millstone	Large rounded rim
92	79/A/70/007	A	Rotary millstone	Rounded, wide flattened rim, pierced centre
93	79/A/70/006	A	Olynthus millstone	Sloping interior, flat base with vertical striations

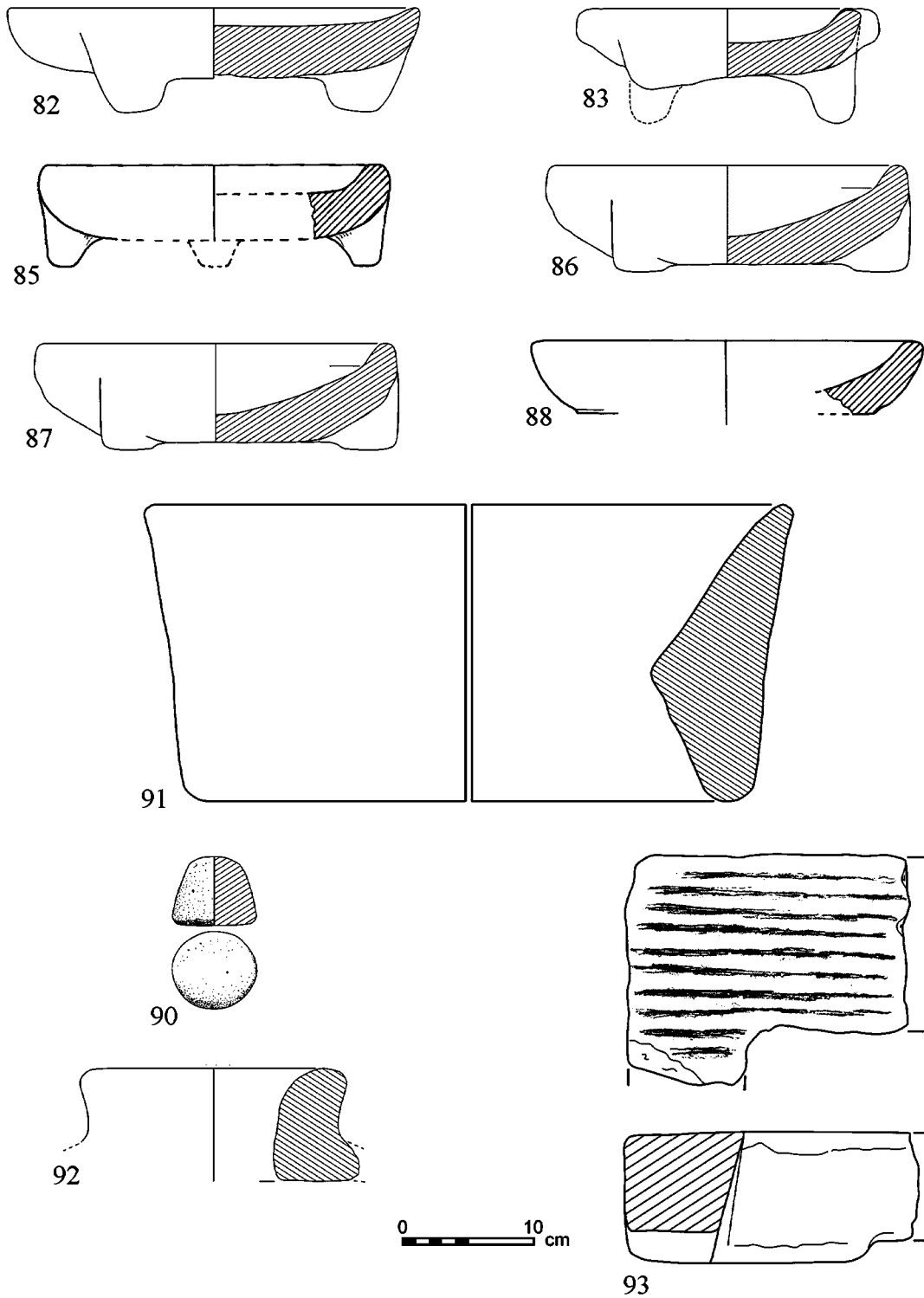


Figure 14.6. Basalt Implements.

No.	Reg. No.	Area	Type	Description
94	79/A/74/062	A	Grinding bowl	Beachrock, curved wall, disc base, horizontal ledge handle or spout with groove extending from rim.
95	C/61/B990	C	Grinding bowl	Beachrock, rim with handle
96	C/61/B397	C	Grinding bowl	Beachrock, rim with handle
97	79/A/56/003	A	Scale-weight	Fine-grained beachrock, circular, trapezoidal section, small cavity drilled into flat base
98	79/A/72/004	A	Bowl	Marble, rounded rim, semicircular ledge handle
99	79/C/61/163	C	Bowl	Marble, flattened rim, rounded body, rounded and decorated horizontal ledge handle
100	C/61/B260	C	Bowl	Marble, flattened rim, lug handle, flattened base
101	79/C/65/485	C	Bowl	Marble, flattened rim, incised decorations undercutting rim, carinated wall
102	79/A/72/116	A	Plate	Marble, yellow with black streaks
103	79/C/61/171	C	Platter	Marble, wide out-curved rounded rim, curved shoulder, shallow interior, flat base

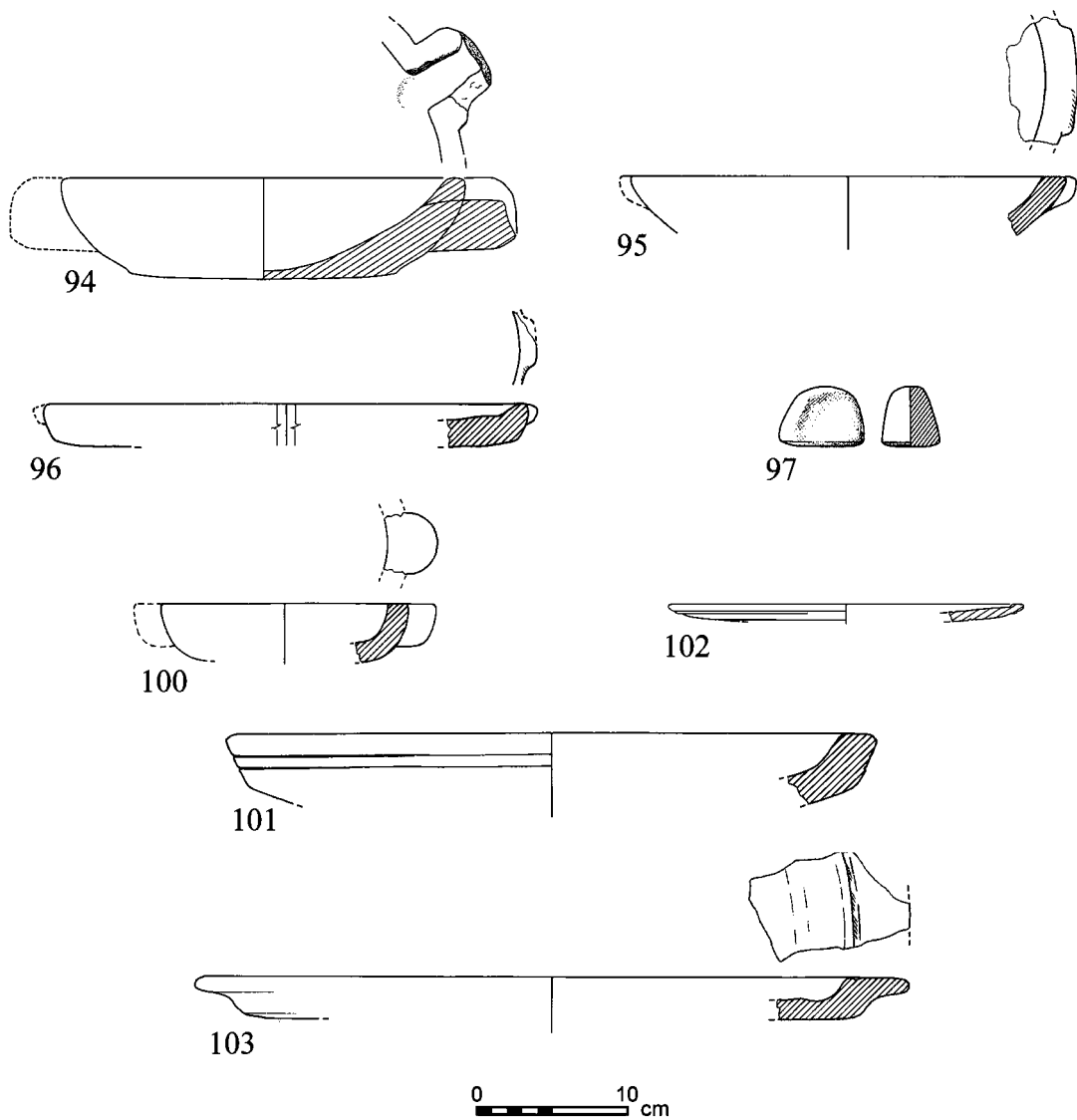


Figure 14.7. Beachrock and Marble Vessels.

No.	Reg. No.	Area	Type	Description
104	79/A/56/017	A	Alabastron	Alabaster, rim of alabastron
105	79/A/71/009	A	Alabastron	Alabaster, flat rim, short neck a bell shaped body with small handles and a wide flat base
106	79/A/71/008	A	Bowl	Alabaster, ledge-rim, curved wall, shallow interior
107	79/A/70/009	A	Bowl	Alabaster, disc base
108	79/A/56/020	A	Bowl	Alabaster, flat rim, oblique walls carinated at the bottom
109	79/A/56/212	A	Bowl	Alabaster, flat rim, oblique walls, carinated at the bottom
110	79/A/70/008	A	Bowl	Alabaster, rounded inverted rim
111	79/A/56/019	A	Bowl	Alabaster, flat rim, slightly convex wall, flat base
112	79/A/72/005	A	Bowl	Alabaster, trumpet base
113	79/C/65/498	C	Platter	Flattened rim, ring base; Light green glaze color on interior and exterior surfaces
114	A/73/B102	A	Bead	
115	C/61/B317	C	Weight?	Conical, impression of fossilized Echinoderm on base

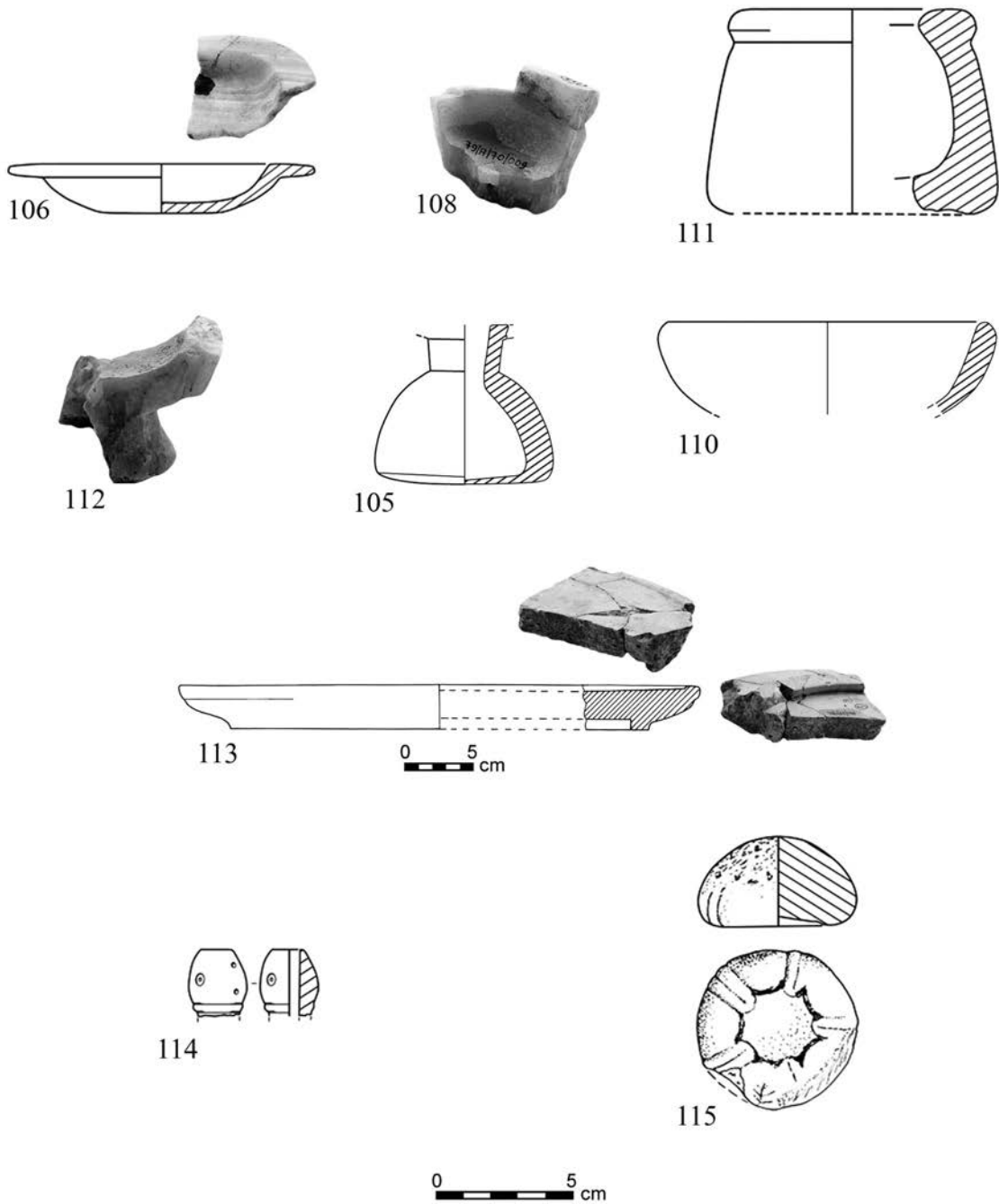


Figure 14.8. Alabaster and Miscellaneous Stone Vessels.

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Chapter 15. Terracotta Figurines

Adi Erlich

Twenty terracotta figurines dating from the Late Iron Age to the Early Roman period were unearthed in Kaplan's excavations in Jaffa. The figurines originated from various contexts. Eleven figurines, which are more than half of the assemblage, were found in Area A. In Area Y, four figurines were revealed. Two plastic vessels or lamps came from residences in Area C, one figurine from Area D, one more figurine from Area J, and another one came from a grave in Area T. The assemblage is divided into early figurines of the Late Iron Age and Persian periods (eight figurines), the late figurines of the Hellenistic and Roman periods (eleven figurines and plastic vessels), and one figurine whose date is uncertain. This corpus adjoins sporadic figurines coming from other excavations in Jaffa, past and present (including some unpublished).

Catalog entries include:

Catalog number and Type

Registration number (Reg. No.), archaeological context, and dating of locus if possible

Technique of manufacture and fabric details

Preservation and maximum measurements (H.=height; W.=width; L.=length; Diam.=diameter)

When the pose is unclear, or if the object should not be described upright, measurements other than height and width are given

Description (unless stated otherwise, left and right of figure and not of viewer)

Dating (either by context, style, or technique)

Parallels. When missing due to inaccurate parallels or poor preservation (see in typological discussion)

15.1. Technique and Production Methods

15.1.1. The Early Figurines

The fabric of the early figurine ranges from buff clay (nos. 6 and 7) to reddish-brown clay with gray core (nos. 1, 2, 3, 5). Two figurines (nos. 4 and 8) are made of reddish clay with a light buff surface. The clay is coarse in most of the cases, including small to large inclusions. Only figurine no. 7 is made of finer, more levigated clay. The firing temperature seems to be low to medium.

The figurines of the Late Iron Age and Persian periods are made in the two techniques which were employed in these periods, hand modeling (most of the animals), casting in mold (mostly human figures), or both in one figurine. The figurines which are handmade are animals (nos. 1, 2, 3, and 4). A horse head (no. 1) is made of a folded foil of clay with appliqué of clay for facial features. The rider and horse were both handmade, first the horse, and then the rider whose legs and hands are attached to the horse (no. 2). The horse and rider is the combination of a handmade horse with a mold-made rider, as is usual in the rider types from Syria and Palestine (no. 3) (Elayi 1991; Erlich 2006:47–48). Nos. 1, 3, and 4 carry incisions marking mouth or nostrils. All the human figures and masks (nos. 5–8) are mold-made. Mask no. 7 has a large appliqué attached to the main surface. Remains of colors are seen on nos. 4, 6 (red), and 7 (blue and red).

The quality of workmanship varies from one figurine to another. No. 3 is very coarse both in its fabric and modeling. Animal no. 4 is better executed. The human figure in no. 5 is coarse and worn out, with a thick wall. The base of no. 6 is made of a thin wall and its modeling is rather clear. The two masks are carefully modeled, despite their thick wall and gritty clay. There seems to be no single atelier for the early figurines. Since they span 400 years and reflect different styles and sources of influence (see below), a common workshop is obviously impossible.

Although we do not know the date for animal no. 20, it is worthwhile noting that its technique resembles that of the early figurines; it is handmade, solid, with attachments of parts and incision marking details. If it had not been unparalleled, this figurine would have been associated with the early group from Jaffa.

15.1.2. The Late Figurines

The fabric of the late figurines varies from one piece to another. Most of them have small inclusions and some have voids and cracks. Some are made of reddish-brown clay with a gray core, similar to some of the early figurines (nos. 9, 12, 16–19). Two figurines are made of buff fabric (14, 15). No. 10 is made of brown-gray fabric, and no. 13 is composed of fine, levigated and smooth fabric, light red on the surface and pink inside. Figurine no. 11 is made of rough and sandy fabric, dark in its interior, red in its core and covered by a white coating.

Terracottas of the Hellenistic and Roman period are generally hollow and made in one or several molds. The production stages included the preparation of the mold from an archetype or ready-made figurine, usually employing separate molds for the front, the back, the head, and the limbs. Thin layers of clay were set in the molds and the varied components were then joined to create the hollow figurine that was subsequently fired in the kiln. During this process, the figurine was generally retouched and refined, vented by a small hole at the back, then coated with white slip and painted (Uhlenbrock 1990; Burn and Higgins 2001:18–20).

Generally speaking, the late figurines from Jaffa employ most of the stages mentioned above. All are mold-made, apart from the phallus (no. 17), which is handmade, and might have belonged to a mold-made figure, and the head of animal (no. 16). Two figurines have modeled backs, although less detailed than the front (nos. 9 and 13). The two vessels, a lamp (no. 18) and vase (no. 19) were also modeled in two molds. No. 12 has an unmodeled back, smoothed and with the remains of a rectangular vent. The walls vary in thickness. Only one figurine (no. 14) preserved the base, which is a typical Hellenistic rectangular plinth base. Signs of retouching with a pointed tool are evident on many figurines (nos. 9, 12, 14–19). No. 15 is covered with white slip, on which blue color was applied. Lamp no. 18 is covered with a typical red slip. The white coating of no. 11, which is part of the clay itself, might also have been the ground for the color to be visible.

The fabric and technique of the late figurines from Jaffa imply a variety of workshops and workmanship. The workshops seem to be unrelated to one another and probably originated from different regions. Some of the details are uncommon among Palestinian figurines, such as the rectangular vent and the modeled backs (see for example terracottas from Maresha, Erlich and Kloner 2008:105–114; or Dor, Erlich 2010:139). It seems that at least some of the late figurines were imported to the site. However, the small number of the items does not allow a more extensive investigation of workshops and production.

15.2. Typology

15.2.1. Late Iron Age and Persian Figurines (Nos. 1–8)

The figurines of the early periods consist of five animals or riders figurines, two human figures and two mask fragments. The dating of the figurines is based mainly on their type and style, therefore it is not secure. Only in three cases (nos. 4, 6, and 7) was the context clearly Persian in date. Some of the figurines belong to types beginning already in the Late Iron Age (nos. 1, 2, 4), while others are solely Persian (no. 10, which is included in the Hellenistic section, could be also Persian). The mixture of animals, riders, human figures, and masks is typical of the Persian period assemblages of figurines from Israel (Stern 1982:165–176). The human figure types are underrepresented, but in such a small collection their lack or scarcity is meaningless.

The archaeological context does not assist in determining the function of the early figurines. They were found in; Area A, in relation to Building M or the fortifications of the Persian and Hellenistic city (nos. 2–5, and 7), and in Area Y, in a Persian pit or in the area of the Hellenistic public center (nos. 1, 6, and 8). Their findspots seem to be spread and inconsistent, unlike some of the assemblages of Persian figurines from Palestine and Phoenicia which come from concentrated depositions thought to be *favissae* (Stern 1982:158–160).

Figurine no. 1 is of a horse head, made in a unique technique. The head is made of a foil of clay folded in the center, as can be seen from below. The head is narrow and long, with mouth and nostrils incised. Pellets of clay are applied to depict a cape covering the head, and the eyes which are set in depressions. The modeling is quite naturalistic. This head belongs to a group of horse and rider figurines typical of the Phoenician coast,

which are dated to the 7th–6th centuries BCE. Similar figurines were found at Achzib, dated to the 7th century (Mazar 2001:145–146, fig. 56; 125 fig. 134; Dayagi-Mendels 2002:153), Kabri (Kempinski and Niemeier 1994:fig. 20 n. 10), Tel Keisan, dated from the 7th century BCE to the Persian period (Paraire 1980:346, pls. 104, 138, nos. 28–33), Dor (Stern 2010, fig. 6.1, pl. 4), and other northern Palestinian sites. Stern relates them to one category group which he defines as “Northern Phoenician horseman,” while Mazar relates this type to a special “Achziv sculptural style” (Stern 2010:9; Mazar 2001:145–146). The type is surely Phoenician, as the modeling differs from the horsemen figurines found in other regions in the Mediterranean (Mazar 2001:146). Except for one head from Tel Zippor (Negbi 1966:pl. 14:90), which is considered by Stern (2010:10) to be of this type and explained as an import from the northern shore, no other figurine was revealed in the south of the country. Therefore, figurine no. 1 was found in the most southern spot along the Phoenician coastline. Together with figurine no. 2, it provides growing evidence for the spread of a Phoenician type southward.

Figurine no. 2 is of a rider too, but unfortunately the figures of both the horse and rider were only partially preserved. The horse and rider are solid and made of a few pieces attached together (horse, rider’s body, and rider’s hands). The horse has thick and solid legs and a thick neck. The rider’s legs are attached to the horse’s legs. Two schematic hands remained, embracing the horse’s neck. The poor preservation does not allow a precise identification of the type. The fragment resembles a North-Syrian variant of the so-called “Persian riders” figurines (Elayi 1991), but according to the pose of the hands and the appearance of the clay, which is coarse and gray with reddish surface, figurine no. 2 probably belongs to the same type of figurine no. 1, the Phoenician horse and rider of the 7th–6th centuries BCE (see parallels above).

Figurine no. 3 is of another type of rider, the so-called “Persian rider” (for the type and terminology see Elayi 1991; Nunn 2000:42; Moorey 2000). It is composed of a combined solid, handmade horse and a hollow, mold-made rider, whose head did not survive. According to the breakage at the front of the figurine, the horse carried a breastplate on its anterior, whose purpose is to protect the horse’s front. The combined technique of solid horse and hollow rider with stamped face is typical of north Phoenician and north Syrian riders (Elayi 1991:208–210), but the variant with the horse’s breastplate is unique to figurines from the south of Israel, the Shephela region (Erlich 2006:47–49; Erlich 2014). Parallels dated to the late 5th and the 4th centuries BCE come from Maresha (Erlich 2006:pl. I 1–2; Erlich 2014: Figs. 6.1–6.23), Tell es-Safi (Bliss and Macalister 1902:pl. 70), Tel Erani (Ciasca 1963:pl. XIX nos. 3, 4), Tel Sipor (Negbi 1966:pls. XIII–XIV), Lachish (Tufnell 1953:pl. 33), Beersheba (Stern 2007:323–324, pl. XXXI nos. 2–4), and Tel Halif (Jacobs forthc.). Stern (2010:10–11) attributes a Phoenician origin to this type. However, the recently discovered assemblages of Maresha and Tel Halif have stressed the predominance of this particular “Persian rider” type the *Shephela*, so that a local south Palestinian origin is more likely. Figurine no. 3 is one of the few figurines of the type found at the coast rather than in inland sites, and to the best of my knowledge, also the northernmost of all examples.

Regarding the use of figurine no. 3, the “Persian riders” were interpreted in various ways (Moorey 2000:480–483). The ridge at the bottom of the horse, which is perhaps made in order to fix it to something, suggests it might have functioned as a toy. Jackson (2006:238–239) discusses this matter regarding figurines from Jebel Khalid in Syria. She maintains that three-dimensional figurines such as solid animals, which are ideal for handling, can be interpreted as toys, while the “Persian rider” type is more suitable as a talisman. However, the three-dimensionality of the “Persian rider” type as well as its theme, are perfect for boys’ toys, as Moorey (2000:482) suggested. Unfortunately, the limited data we have on the archaeological context of this terracotta does not allow for a more accurate understanding of its function.

Figurine no. 4 is a solid head, schematically modeled. The head combines features of both bovine and horse. The elongated head and the protruding eyes suggest a horse, while the shape of the nostrils and the horns seem to portray a bull. Solid horned animals are common in Iron Age II assemblages, like the figurines from Jerusalem (Tchernov 1996:85–86; Gilbert-Peretz 1996: figs. 14–15, pl. 5). However, the production of such solid horned animals continued in the Persian period (Stern 1995:443; Stern 2010:23, fig. 27). Heads of horned animals were also found at Akko (Messika 1996:34, pl. 5 nos. 54–58). Head no. 4 was found in the Late Iron Age/Persian phase (Stratum 8) under one of the walls (W.800) of the Persian–Hellenistic Building M in; Area A.

Figurine no. 5 is very fragmentary and worn out, therefore its identification is problematic. The figurine is made in two molds. Its wall is thick and awkward and its coarse fabric is gray with a red surface. These

technical details suit early figurines, therefore, despite its late context (Hellenistic and Early Roman citadel?), the figurine seems to be Persian in date. According to the seam attaching the front and back, it depicts a human figure with one arm (left arm?) raised toward the face. This figurine might belong to the type of the seated or standing man fondling his beard, found all over Phoenicia and Palestine and considered to be a local deity (Stern 1982:165–166; Bisi 1990:77–78; Nunn 2000:80–81; Stern 2010:6–8, fig. 2; For examples from Palestinian sites, see also Erlich 2006: 49, n.23).

Figurine no. 6 is a small fragment of a base, made of a thin wall with remains of red paint on its pale surface. A figure was probably standing on it. In this case, the dating was made according to the archaeological context of a Persian-period pit in Area Y, which is rich in findings including Greek imports.

Figurines nos. 7 and 8 probably depict masks. No. 7 is a large fragment of a curved wall with ridges, and a large horn-like object attached to it. Between the horn and the rest of the main fragment there is a curved ridge painted in blue, and the surface bears the remains of a red coloring. This fragment might be part of a large Gorgon mask, such as those found at Dor and interpreted by Stern as the head tiles of a temple (Stern 2002; 2007; 2010:27–30, fig. 32, pl. 19).¹¹¹ The horn is the left boar tooth stretching upward, and the surface it is attached to would then be the left cheek of the monster. Figurine No. 8, which portrays a large protruding eye and a wrinkled eyebrow, might be a Gorgon's eye, similar to the large Gorgon and to another fragment of a mask from Dor (Stern 2000:367, fig. 268 left). Both our no. 7 and the Dor fragments bear remains of blue coloring. The fragments from Jaffa are a bit smaller than those from Dor, yet they are much larger than life-size. The masks could have been used as cult masks and not as antefix, because of their relatively small scale. The masks are of the late 5th or early 4th century BCE.

1 Horse head

Reg. No. 79/Y/68/361; Area Y, Sq. Z14, Locus 29, Bucket 199

H.: 2.8; W. in profile 6.5; W. in front: 2.7

Made in two molds, with incisions and appliqué. Pale red clay (2.5YR 7/4), gray core. Grits and small voids.

Date range: Late Iron Age, 7th–6th cents. BCE

Parallels: Paraire 1980:pls. 104, 138, nos. 28–33 (Tel Keisan, VII–V century BCE); Messika 1996:pl. 4 no. 50 (Tel Akko, Persian); Stern 2000:168, fig. 99A; Mazar 2001: fig. 56, p. 125 fig. 134.

2 Horse and rider

Reg. No. 79/A/58/085; Area A

H.: 9.5; W. in profile: 4.8; W. in front: 5

Handmade and solid. The rider is made separately and attached to the horse's body.

Pink clay (2.5 YR 8/4), gray core. Large grits.

Date range: Late Iron Age, 7th–6th cents. BCE

For parallels, see no. 1.

3 Horse and rider

Reg. No. 79/A/71/149; Area A, Bucket 340 1971

H.: 10.5; W. in profile: 7; W. in front: 6.7

Horse handmade and solid, with incisions and appliqué. Rider made in two molds and hollow, attached to the horse. Pale red clay (10R 7/4), gray core. Large and small grits and voids and signs of straw.

Date range: Persian period, *Shephela* type

Parallels: Aharoni 1975:pl. 18, no. 3 (Lachish); Stern 2007:pl. XXXI, nos. 2–4 (Beersheba region); Erlich 2006:pl. I (Maresha, and see there for further parallels).

4 Animal head

Reg. No. 79/A/72/096; Area A, Sq. J3, Bucket 170

H.: 3; W. in profile: 5; W. in front: 3

Solid, handmade, with incisions. Remains of red paint. White surface of clay (10YR 8/1) pink interior (7.5YR 7/4). Grits.

Date range: Late Iron Age or Persian

¹¹¹ I would like to thank Prof. Ephraim Stern and Dr. Yiftah Shalev for drawing my attention to the Gorgon mask from Dor as a parallel to fragment no. 7.

5 Human figure

Reg. No. 79/A/58/086; Area A, Sq. I12

H.: 5.2; W.: 3.5

Mold made (worn mold), thick wall, worn surface. Weak red (2.5 YR 6/4), gray core, grits.

Date range: Persian period

6 Base

Reg. No. 79/Y/68/362; Area Y, Sq. X12, Locus 1, Bucket 135

H.: 4.3; W.: 2.3

Mold made, remains of red color (7.5 YR 8/4), grits.

Date range: Persian period?

7 Mask fragment(?)

A/70/B284; Area A, Building M, Bucket 284

L 9; W.: 5.5

Mold made fragment with a handmade projection attached to it. Remains of light blue color and perhaps some red (5YR 8/3), small grits and voids.

Date range: Persian period

Parallels: Stern 2002:55 (Gorgon mask fragment from Dor).

8 Mask fragment

Reg. No. 79/Y/68/363; Area Y, Sq. Z15, Locus 19, Bucket 162.

Mold made, thick wall. White to pink (5YR 8/3), coarse clay with grits, voids and crackles.

H.: 4.9; W.: 6

Parallels: Stern 2002:55 (Gorgon mask fragment from Dor).

15.2.2. Hellenistic and Roman Figurines (Nos. 9–19)

Eleven figurines of the Hellenistic and Roman periods were recovered in Kaplan's excavations in Jaffa. Area A, the historical citadel of Jaffa, yielded the majority of the figurines (nos. 9, 11–14), all female types. The Early Roman residences in Area C yielded two vessels with zoomorphic modeling or handle, which were probably in use in the houses (nos. 18 and 19). One Hellenistic (if not Persian) figurine came from Area J (no. 10), one from Area D (no. 16), and one from Area Y (no. 17). The only figurine found in situ is no. 16, which came from a Hellenistic burial site or grave. The types consist of two nude female deities (9, 10), four standing draped females (nos. 11–14), one female or bust (no. 15), one animal (no. 16), one phallus (no. 17), and two decorations of vessels (nos. 18 and 19). The assortment of types is normal in relation to Hellenistic figurines and bears no special significance.

Figurine no. 9 depicts the Greek goddess of love, Aphrodite. The goddess is semi-draped, with an upper nude torso softly rendered. She stands in sharp contrapposto, with her right shoulder raised up, while her left arm lies on something which did not remain. This figurine is one variation of the many nude and semi-draped Hellenistic types of Aphrodite, created after the Aphrodite of Knidos by Praxiteles (Havelock 1995). Similar Hellenistic figurines were retrieved from Kharayeb in Lebanon (Chéhab 1951–54:pl. XVIII, no. 1) and Delos (Laumonier 1956, pl. 51, no. 496). The elegant style of the soft, feminine body, and the technique involving the modeled back and the slip and color covering the figurine, are evidence of fine workmanship.

Although mentioned in inscriptions related to Palestine (see discussion in Erlich and Kloner 2008:11–12; Erlich 2009: 113), Aphrodite was not very popular among Hellenistic terracotta figurines from Israel. A figurine of the Aphrodite Anadyomene type was uncovered in Maresha (Erlich and Kloner 2008:pl. 5, no. 16). Some fragments of nude females from Akko may depict Aphrodite (Messika 1996:69). The terracottas of Aphrodite from Nahal Me'arot on the Carmel and from Dor should be dated to the Early Roman period (Illife 1934). The image of the Greek goddess of love is more frequent on minor art objects, such as the bullae from Tel Kedesh (Herbert and Berlin 2003:51, fig. 26). The very close parallel from Kharayeb near Tyre (mentioned above) points to a possible Phoenician origin for this figurine.

Figurine no.10 is another nude female, but its poor preservation causes problems of both identification and dating. It portrays a nude or tightly dressed torso of a female, with two locks of hair lying on her right shoulder, probably depicting a wig. Similar dressed females appear at Phoenician sites dated to the Persian

period, such as Dor (Stern 2000: color pl. VII, no. 3) and Kharayeb in Lebanon (Kaoukabani 1973:pl. VIII, nos. 3–4). Other figurines in Eastern style are portrayed naked. Stern (2010:11–12) divides the nude females, whom he identifies as Astarte-Tanit, into four groups: holding her breasts, pregnant, holding an infant, and with arms at the sides of her body (the last corresponds to our type). The Egyptian wig donned by them is interpreted by him as a Phoenician creation. Nevertheless, figurine no. 10 is more probably Hellenistic in date. The two molds technique (of which only the front remained) and the rather thin wall, smooth surface and remains of white slip and color, all may point to a Hellenistic nude female. A similar Hellenistic figurine was retrieved in the Zeus shrine at Akko (Messika 1996:pl. 13 no. 116). Other close examples portraying Aphrodite come from Delos (Laumonier 1956:pl. 51, nos. 485–487). The Egyptian wig may point to a Hellenistic figurine of the Ptolemaic “Isis Aphrodite” type, which depicts a nude or semi-nude female with an Egyptian wig and Isis headdress (for the type and its terminology see Erlich and Kloner 2008:16–17). Such figurines were found in Israel at Akko (Messika 1996:pl. 13, no. 123; Messika 1997:122, fig. 1) and Maresha (Erlich and Kloner 2008:16–18, pl. 7, nos. 27–29).

Figurines nos. 11–14 portray standing draped females, a well-known type in Hellenistic repertory. The four are made in different clays, scales, types, and styles, and demonstrate the variety of the Jaffa group.

Figurine no. 11 is a local imitation of the well-known *Tanagra* style of a standing draped female (Higgins 1987:117–159; Louvre 2003). It depicts a female draped with himation, in which the two arms are wrapped, the right arm resting on the thigh and the left arm on the waist. Similar figurines were found in Alexandria (Kassab Tezgör 2007:40, no. 107), Cyrenaica (Burn and Higgins 2001:pls. 108–109), and fragments of a similar type from Maresha (Erlich and Kloner 2008:pl. 16, no. 78) and Akko (Messika 1996, pl. 9, no. 43). The figurine from Jaffa resembles the Cyrenaica figurines in its shallow and schematic folds. The sandy texture (probably *hamra*, red soil) and the worn mold used to produce this figurine attest to a local or regional production. *Tanagra*-style figurines were found in Palestine, but not in large quantities. Two groups of standing draped females, mostly local imitations, were retrieved from Maresha (Erlich and Kloner 2008:29–30) and Dor (Erlich 2010:124, 175–176).

Figurine no. 12 depicts a standing draped female wearing a peplos. Her left arm is bent to the waist and holds a flat rectangular object. The object may be an offering brought by a votary to the deity, as in many examples from the supposed favissa of the shrine in Area L at Akko (Dothan 1993:24; Messika 1996:62, 66, pls. 8–10 and especially no. 66). The female seems to be young, as she is wearing a peplos and not the chiton and himation (Bieber 1928:36). Young votaries in hieratic pose or carrying offerings are often portrayed wearing a peplos. Two votaries dressed like this were uncovered in Maresha (Erlich and Kloner 2008:pl. 9, no. 43, pl. 20 no. 103).

Figurine no. 12 is worn and crudely modeled. The remains of a rectangular vent on the back resemble some of the Akko figurines (Messika 1996:74) and differs from the Maresha terracotta, in which the vents are always round (Erlich and Kloner 2008:110–111).

Figurine no. 13 is a fragment of a standing draped figure. It is too small to determine its gender, but the pose and the folds of the garment at the front and back suggest a female wearing a himation rather than a male wearing the more typical chlamys. The hands which are adjacent to the body suggest a hieratic pose. A votary wearing a peplos from Maresha stands in a similar pose (Erlich and Kloner 2008:pl. 9, no. 43). Figurine no. 13 is made of a well-levigated clay, with thick walls which leave only a narrow inner space. Both the front and the back are modeled. The technical details seem foreign to the Jaffa region.

Figurine no. 14 is a rectangular plinth base, on top of which stands in contrapposto a female dressed in a long garment. Only the lower left part of the figure survived. The drapery folds are retouched in an awkward manner. This is a fragment of another figurine of the standing draped females, so common in Hellenistic terracottas.

Figurine no. 15 is a small fragment depicting a draped female holding a four-petal flower at her breast. Unfortunately, it is too small as to identify the type. The closest parallel comes from Akko, consisting of a figurine said to be a bust (Messika 1996:71, pl. 7, no. 4). The Akko bust is dated from the late 4th to the early 3rd centuries BCE. Another female holding a flower is one of the two seated females (goddesses?) portrayed on a figurine from the Hellenistic shrine at Beersheba (Derfler 1981). A stone figurine from Tel Anafa depicts a woman standing and holding to her chest a flower or a bird (Erlich 2009:23). The above-mentioned parallels were associated with Greek goddesses, especially with Demeter and Kore and their cult. This fragment,

whether a bust or a figurine, most likely depicts a goddess or a votary, similarly to the many bearers and dedicators from the temple of Demeter and Kore on Acrocorinth (Merker 2000).

No. 16 is an animal of which only the schematic head and curved long neck survived. The stretched out and curved neck, and the modeling of the straight mouth and elongated nostrils, suggest a camel. Camel figurines appear at Hellenistic sites in Palestine such as Maresha (Bliss and Macalister 1902:pl. 70:145 Sn; Erlich and Kloner 2008:53) and Akko (Messika 1996:pl. 13, no. 131). Hellenistic camel figurines outside Israel appeared where their natural habitat was located in Mesopotamia (Van Buren 1930:pl. XLV, fig. 218; Van Ingen 1939:pl. LXXVI), Egypt (Vogt 1924:76, fig. 61; Bayer-Niemeier 1988:pl. 25:131, 132; Nachtergaele 1989:292–293, 304, pl. 1), and Cyrenaica (Besques 1992:pl. 41d; Burn and Higgins 2001:pl. 132). The supposed camel from Jaffa seems to be different though; the minimal modeling of the head and the gray clay with the red surface recalls earlier figurines. The only camel figurine dated to the Persian period was retrieved from Dor (Stern 1995:442, no. 18; 2010:23, fig. 27.3, pl. 16). However, the double-mold technique seen at the fracture of the neck implies a Hellenistic date.

Figurine no. 17 is a solid, erect phallus, narrow at its base and growing wider at the corona. Its base is broken, so it is not clear if it is a free standing body part or part of an ithyphallic figure, typical of Ptolemaic and Roman Egypt. Bailey (2008:69) suggests that ithyphallic figures present hypersexuality and their purpose was to ensure the fecundity of the dedicator, to avoid impotence, or to symbolize fertility. Another suggestion is that these are dedications from youths who have reached the age of puberty. Phallic symbols were extremely popular in Delos, and are depicted in huge stone statues as well as in small objects (Deonna 1938:pl. XCVIII; Laumonier 1956:pl. XXIII, nos. 1214, 1215). They are related mostly to Dionysiac cults and are thought to retain prophylactic qualities (Deonna 1938:347). Another view is that even separate phalli are meant to be applied to or to be inserted in figures (Bailey 2008:72).

Hellenistic terracotta phalli were discovered in Hellenistic sites, as in Asia Minor (Schürmann 1989: Pl. 96:573) and in Egypt (Adriani 1952:pl. XXV, no. 5; Dunand 1990:336, no. 1016; Bailey 2008:pl. 44, no. 3260, pl. 45, no. 3261). Terracotta phalli were also revealed in Hellenistic and Roman sites in Palestine, in Maresha (Erlich and Kloner 2008:pl. 36, no. 196, Hellenistic) Caesarea Maritima (Patrich and Abu Shaneb 2008:315, no. 333, Early Roman), and Dor (Erlich 2010:135, 200, no. 98, Hellenistic?). The archaeological context of the phallus from Jaffa points to an Early Hellenistic date. Its finding in Area Y, on a paved floor of the public and commercial center of the city, may imply its usage as ensuring fertility and prosperity. Otherwise, it could have been part of a figurine traded at the site.

Objects nos. 18 and 19 are most probably plastic vessels; one is a lamp handle and the other a bowl handle, originating from the Roman dwellings in Area C. It is worthwhile noting that these figurative decorations came from dwellings supposedly owned by Jews, who did not discard or dismantle them. This should be compared with demolished faces in decorated vessels owned by Jews, such as the bronze vessels found in the Bar Kokhba caves in the Judean desert (Yadin 1963:65–68).

Figurine no. 18 was retrieved in an ash layer of a dwelling dated to the 1st to 3rd centuries CE. It depicts a squat horse's head with schematic and stylized facial features marked by incisions. The animal has no neck, and the head is directly attached to the body, which broadens on one side only. The fragment is covered by a red slip, which is typical of vases and lamps. This is probably the decoration of a lamp of the Broneer XXI type, which carries two horses' heads instead of volutes (Bailey 1988:327–328, pls. 76–77).¹¹² The Broneer XXI type is dated from the 1st to the early 2nd centuries CE. Some of the Knidian examples are schematic and crude, such as the horse from Jaffa. A local or regional production, which might explain the awkward modeling, is not unreasonable, as this type was also manufactured in Egypt (Bailey 1988:328; Petrie 1905:pl. LV, no. D 70h), and one lamp was purchased in Beirut (Rosenthal and Sivan 1978:20, no. 44). Another lamp, better executed, was recently found in the Roman mansion in City of David, Jerusalem (Weksler-Bdolah 2009: Front cover).

Figurine no. 19 represents a horse's head made in two molds, with very detailed and clear facial features, reins and mane. The straight bottom of the head suggests that it is part of a handle of a bowl or patera. Patera handles of Knidian ware, dated to the 2nd to early 3rd centuries CE, were shaped as animals, imitating earlier bronze bowls (Hayes 1972:411–412). Similar heads of hollow handles were found in the Athenian agora, dated to the 3rd to 4th centuries CE (Waagé 1933:306–307, fig. 6; Robinson 1959:103–104, Pl. 26). The head

¹¹² I would like to thank Shulamit Terem for this identification.

from Jaffa is more naturalistic than the Athenian handles, and seems stylistically earlier, perhaps 2nd–3rd century CE. A horse head of a different style decorates a handle from Alexandria (Pagenstecher 1923:pl. XXXIX, no. 5). Similar handles with heads of other animals were found in the Tenth Legion kilnworks in Jerusalem, one of them is hollow and another one unglazed (Magness 2005:82–84, figs. 13–14). Robinson (1959:103) notes that horses are rare in such handles compared with rams and panthers, but Kenrick (1985) maintains that horses are also frequently found in them. The lack of red glaze is atypical, unless it was not preserved.

9 Aphrodite

Reg. No. 79/A/56/261; Area A, Sq. F5

H.: 8; W.: 6.5

Made in two molds, retouched. Pink clay (5YR 7/4), small grits and voids.

Date range: Hellenistic

Parallels: Chéhab 1951–54:pl. XVIII, no. 1 (Kharayeb near Tyre, Hellenistic); Laumonier 1956:pl. 51, no. 496 (Delos, Hellenistic).

10 Female (nude?)

Reg. No. 79/J/70/078; Area J, Bucket 27

H.: 4.8; W.: 4.3

Mold-made, slight remains of white slip and red color. Burnt clay, brown (7.5 YR 5/2), grits and voids.

Date range: Persian or Hellenistic

Parallels: Kaoukabani 1973: Pl. VIII, nos. 3–4 (Kharayeb, dressed female with wig, Persian); Messika 1996:pl. 13, no. 116 (Zeus shrine, near the post office, Akko, Hellenistic); Laumonier 1956:pl. 51, nos. 485–487 (Delos, Aphrodite, Hellenistic).

11 Standing draped female

Reg. No. 79/A/71/150; Area A, Sq. H2, Bucket 672

H.: 11.5; W.: 6.6

Mold-made with possible remains of white slip. Red clay (2.5YR 6/6) with brown interior and white surface (2.5YR 8/1). Small grits and voids. Sandy.

Parallels: Kassab Tezgör 2007:40, no. 107 (Alexandria); Burn and Higgins 2001:pls. 108–109 (Cyrenaica, Hellenistic).

12 Standing draped female

Reg. No. 79/A/72/112; Area A, Sq. J101, Bucket 553

H.: 8.9; W.: 3

Mold-made, only the front modeled. Retouching in drapery. Remains of a square vent (left side only). Pale red clay (2.5YR 7/4), gray core, a few small grits.

Date range: Hellenistic

Parallels: Messika 1996:pl. 10, no. 66 (Woman holding a vessel, from Ben Ami Street, Akko, Hellenistic); Martinez-Sève 2002:254, no. 291 (Susa, Hellenistic).

13 Standing draped female

Reg. No. 79/A/56/180; Area A

H.: 2.5; W.: 4.2

Made in two molds, for the front and back. The surface is pored and polished. Pale red clay (2.5YR 7/4), levigated with a few grits.

Date range: Hellenistic

14 Base of a standing draped female

Reg. No. 79/A/58/090; Area A

H.: 3.9; W.: 3.3

Mold-made, retouching with incisions. Pink clay (7.5 YR 8/3), voids.

15 Female holding a flower

Reg. No. 79/T/61/036; Area T, Tomb 5, Bucket 10

H.: 5.1; W.: 3.3

Mold-made, retouched, with white slip and remains of blue color on drapery. Pink clay (5YR 7/4), small white grits.

Date range: Hellenistic

Parallels: Messika 1996:pl. 7, no. 4 (Tel Akko, Early Hellenistic).

16 Animal (camel?)

Reg. No. 79/D/63/042; Area D

H.: 6.2; W. in front: 2.3

Head solid with some incisions, body made in two molds. Pale red clay (2.5YR 7/4), gray core. Small grits and cracks.

Date range: Hellenistic

17 Phallus

Reg. No. 79/Y/64/132; Area Y, Sq. 3, Locus 605, Bucket 47

L.: 8; Diam.: 2.5.

Solid, handmade and incised. Red (2.5YR 6/6), gray core, grits and voids.

Date range: Early Hellenistic

Parallels: Erlich and Kloner 2008:pl. 36, no. 196 (Maresha, Hellenistic); Erlich *forthc.* (Dor, Hellenistic);

Patrich and Abu Shaneb 2008: 315, no. 333 (Caesarea Maritima, from fill, probably Early Roman).

18 Horse (lamp fragment)

Reg. No. 79/C/61/384; Area C, Locus 416, Bucket 230

H.: 5; W. in profile: 3.5; W. in front: 3.4

Made in two molds, incisions to depict details, slipped in red outside and partially inside. pink clay (2.5 YR 8/3), tiny grits.

Date range: Roman, 1st cent. CE

Parallels: Bailey 1988:pls. 77–78.

19 Horse (handle of a bowl?)

Reg. No. 79/C/61/385; Area C

H.: 2.9; W. in profile: 4.8; W. in front: 2.4

Made in two molds and retouched with incisions. Weak red clay (2.5YR 6/4), small grits.

Date range: Roman. 2nd–3rd cents. CE

15.2.3. Figurine of Unknown Date (No. 20)

Figurine no. 20 portrays a crude and solid torso of an animal, most likely a horse. The head and legs are missing. The two straight ridges which are broken across the back of the animal may indicate a missing rider, two separate riders or a load. The depressions between and next to the ridges are decorated with incisions of concentric circles. The rest of the surface of the body on the back and sides is covered by incisions of rhombi filled with a grid pattern. This fragment is unparalleled to the best of my knowledge. The solid body and the crude technique hint either at an early date or at a date later than the Roman period.

20 Animal

Reg. No. 79/A/73/167; Area A, Sq. I101, Bucket 200

H.: 3.5; W. in profile: 9.5

Handmade and solid, with incised patterns covering the body. Dark gray clay (2.5Y 4/1), small and large grits and cracks.

15.3. Conclusions

The twenty figurines from Jaffa span a range of approximately 800 years. The earliest figurines (nos. 1–2) are of late Iron Age or early Persian period (7th–6th century BCE). Figurines nos. 3–8 are dated to the 5th to 4th centuries BCE. Terracotta nos. 9–17 are Hellenistic (3rd to 1st centuries BCE), while the two vessel decorations, nos. 18–19, are Early Roman. The long span of time corresponds with the variety of types as represented in such a small corpus. Accordingly, there is no use in determining workshops or industry.

Despite the small assemblage over a long period of time, some conclusions can be drawn. Jaffa is located at the midpoint of the Palestinian coast line, and it used to be a port city. It is on the border between regions:

the coast to the south, Idumea on the south-east, Judea on the east, Phoenicia on the north, and the Mediterranean Sea opens to the west. This location causes the versatile character of such a small assemblage. Two early types demonstrate the central location of Jaffa on the border of several regions: Horsemen nos. 1 and 2 with the folded head of the horse belong to a northern-Phoenician type, and Jaffa is the southernmost piece of this type known by now. On the other hand, horseman no. 3 with the breastplate for the horse belongs to an Idumean type (Erlich 2006), and the Jaffa specimen is the only one known to me outside Idumea, as being a northern most representation of this type. Except for figurine no. 3, the early figurines resemble those found at coastal sites such as Dor.

The Hellenistic group also shows versatility and different sources of inspiration. Aphrodite no. 9, the Tanagra-style female no. 11, and the female holding a flower are all Hellenistic koine types. Figurine no. 13 is also Hellenistic but its stiff modeling recalls earlier or more conservative figurines. Figurine no. 12 resembles many terracottas of votaries from Cyprus and the Levant. The camel no. 16 is typical of Palestinian repertoires. Figurine no. 10 and phallus no. 17 may belong to Ptolemaic types.

The only two terracottas of the Roman period are the decorations of a lamp and a vessel. This is not surprising, since the manufacture of terracottas largely declined during the 1st century CE.¹¹³ The two horse decorations came from dwellings which seem to have belonged to Jews. Their owners did not eliminate figural decorations on their vessels, despite the general trend of Jews in the two first centuries CE to use an-
iconic representations. Again, the cosmopolitan character of the harbor city of Jaffa is reflected in these vessels.

¹¹³ There are a few assemblages of Roman figurines from Israel, most of them as yet unpublished (e.g., Sussita, Kastrá, Beth-Shean). They are much fewer than the Persian and Hellenistic repertoires from Israel.

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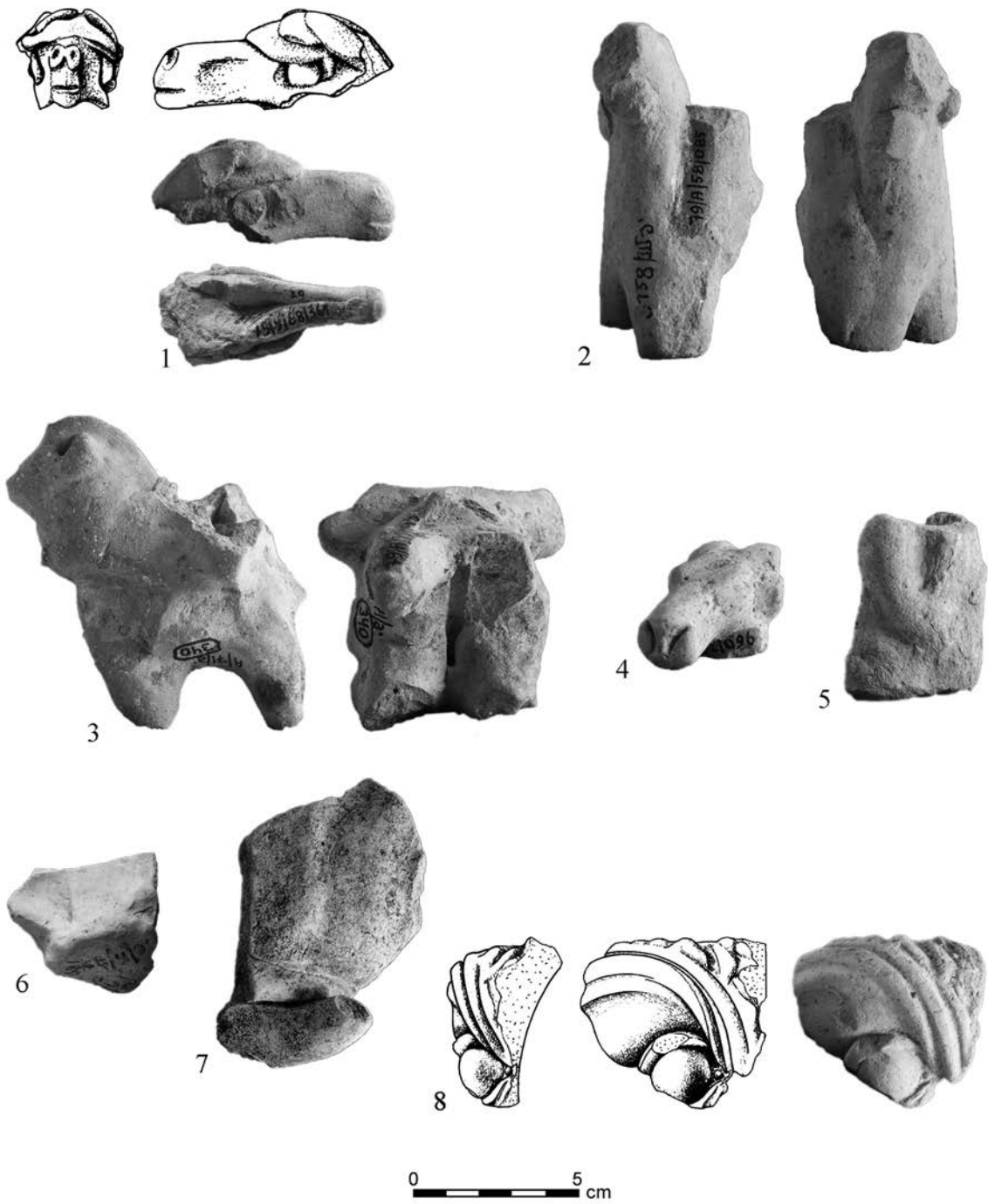


Figure 15.1. Figurines of the Late Iron Age and Persian Periods.

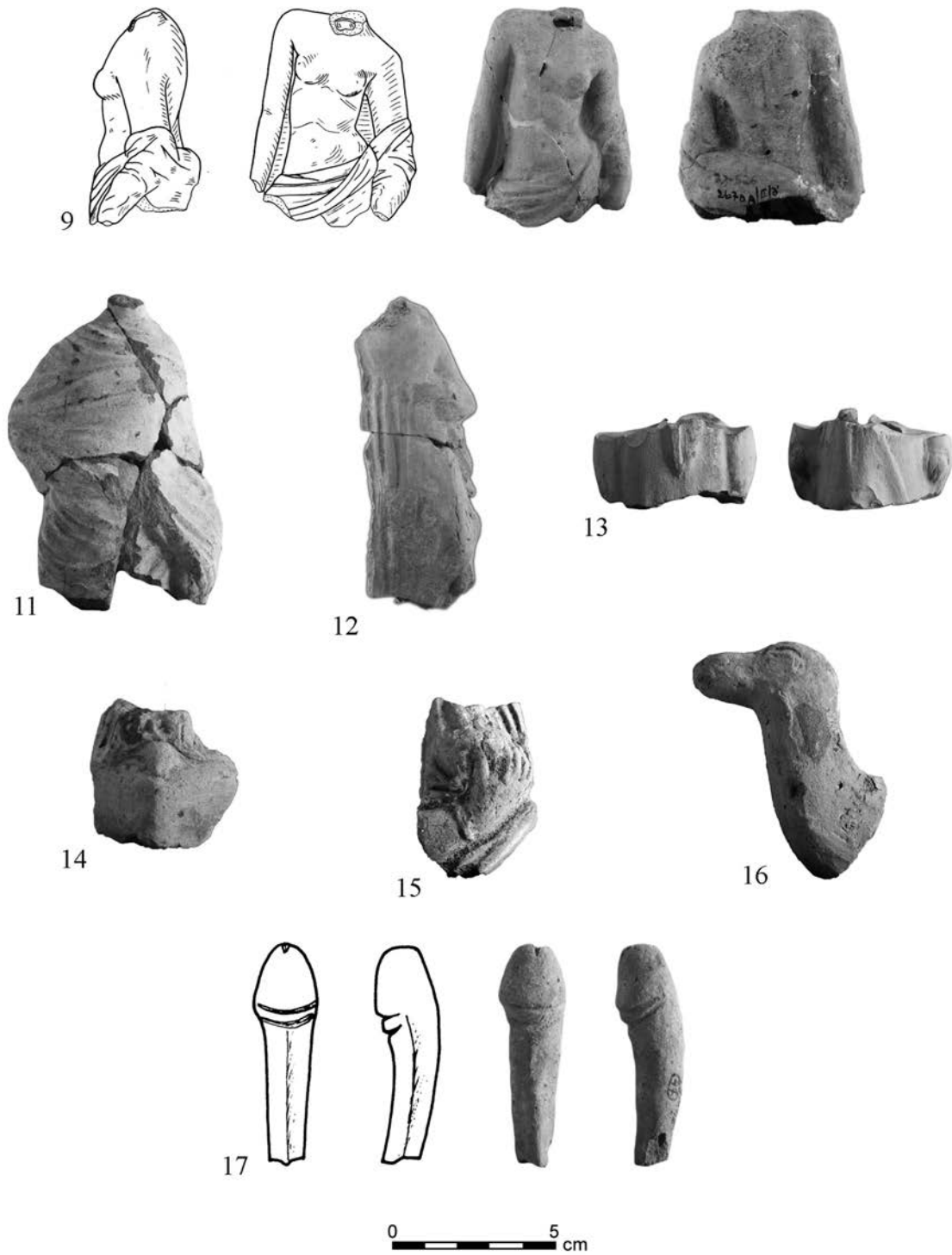


Figure 15.2. Figurines of the Hellenistic and Roman Periods.



Figure 15.3. Figurines of the Hellenistic and Roman Periods.

Chapter 16. The Necropolis of the Hill of Abu Kabir

Avner Ecker

Within the city limits of modern day Tel Aviv, between Herzl St. (on the west) and Kibbutz Galuyot St. (on the north) lies the hill of Abu Kabir.¹¹⁴ In 1873, Clermont-Ganneau discovered the remains of an extensive necropolis cut into the *kurkar* (calcarenite) bedrock of this hill. When he arrived at the site, it was already badly damaged by quarrying activity carried out by the *falahin* who had been settling in there since 1831 (Kark 1990). He toured the cemetery grounds and bought several Greek, Aramaic, and Hebrew epitaphs (*ARP* II:130–148). During the same period, both the Baron Ustinov and the Russian Archimandrite Kapustin were collecting finds and inscriptions from locals. The Russian Church is built on top of the hill, near the “tomb of Tabitha,” which is one of the caves of the necropolis. Today, cumulatively, we know of about 80 inscriptions originating from this cemetery, most of which were published (*CIJ* II:892–960; Klein 1920:110–156; Pedersen 1928; Price 2003).¹¹⁵ Most inscriptions bear Jewish symbols or clear Jewish names and none show any Christian or pagan signs, thus allowing us to safely conclude that the cemetery was Jewish (Price 2003:217; see also Price 2012).¹¹⁶

The necropolis was first scientifically excavated in 1950 when J. Kaplan (Kaplan 1959:95–98) began a series of salvage excavations around Abu Kabir. They were carried on intermittently until 1976. Kaplan had briefly published the 1960–1972 excavations in notes within different scientific journals, but nothing else from these 25 years of excavations was ever published.¹¹⁷ Since the 1970s more salvage excavations were carried out in the cemetery by IAA archaeologists Y. Levi, A. Golani, E. Ayash, and M. Ajami, and all these excavations were published in *Hadashot Arkheologiyot*.¹¹⁸

The present report is the final report of the Jacob and Haya Ritter-Kaplan excavations in the Abu Kabir cemetery, and it is intended plainly to present the data collected over the years of excavations.¹¹⁹ The finds from the excavations were kept in storage in the Jaffa Antiquities Museum¹²⁰ and the report is based upon the following data:

Bucket tags

Plans, field diaries, and photos from Kaplan’s archive¹²¹

Jaffa Museum catalog

IAA coin card catalog¹²²

Each item described received a registration numbers according to two systems:

1. Museum registration number (Reg. No.): site number/year of excavation/register number.
2. New registration number: year of excavation/site number/register number.

¹¹⁴ This chapter was part of my MA thesis on the necropolis of Abu Kabir, written under the supervision of Hannah M. Cotton and Zeev Weiss, at the Hebrew University of Jerusalem. I thank Orit Tsuf for entrusting me with the artifacts from these excavations. Since the submission and last revision of the manuscript several publications of relevance to this report have appeared, the most important of which are the inscriptions from the Abu Kabir cemetery with introductions and commentaries by Jonathan Price (see pp. 36–134 for nos. 2174–2255 in Ameling et al 2014). Also, a first compilation of archaeological and historical studies of the Jaffa Cultural Heritage Project has been published: M. Peilstöcker and A. A. Burke (2011) including O. Tsuf’s treatment of the Roman pottery *vis-à-vis* the contemporary assemblages from Jerusalem (Tsuf 2011:271–290) and R. Kark’s “Ottoman Jaffa” (Kark 2011). One must also mention E. Jakoel’s M.A. thesis (Jakoel 2013).

¹¹⁵ Anna Veronese (2010) of the Hebrew University in Jerusalem wrote her MA thesis about the Corpus of Jewish inscriptions from the Jaffa Abu Kabir necropolis. I thank her for sharing both her data and ideas with me.

¹¹⁶ For all inscriptions, see Veronese 2010.

¹¹⁷ *1960 season*: Kaplan 1961; 1965; *1964 season*: Kaplan 1964; 1965; *1966 season*: Kaplan 1966a; 1967; *1972 season*: Kaplan 1974a; 1974b; 1974c; 1974d; 1975. See also Kaplan 1959:95–98; 1972:66–95; 1993:1456.

¹¹⁸ Levy 1988–9; 1993; Levv and Golani 2000; Ayash 1999; Ajami 2006.

¹¹⁹ A final analysis of the site of the cemetery will be published elsewhere.

¹²⁰ Conservation and cleaning of some of the finds was done by Miriam Lavi of the Institute of Archaeology at the Hebrew University. Apart from photographs from the IAA and Jaffa Museum of a Antiquities, new photos were taken by Anat Litan.

¹²¹ Folders: 56–1950–Kibuz Galuyot and Herzl (Abu Kabir); A–25–1964–Kibuz Galuyot; A–340–1972–Kibuz Galuyot; A–501–1975–Jaffa Kibuz Galuyot st.; 13–1951–Kibuz Galuyot and Herzl. I wish to thank Arieh Rochman–Halperin and Silvia Krapiwko of the IAA Archive in the Rockefeller Museum for all their help and hospitality while digitizing these folders.

¹²² I would like to thank Donald T. Ariel for letting me publish the coins from the Israel Antiquities Authority card catalog, all of which he himself deciphered. I also wish to thank Robert Kool for helping me with the Ottoman coinage.

Burial Cave	Find nos. and inscriptions	Publication	IAA Archive folder
1950			&-46-50; A-25-1964
1951/1			&-46-50; &-13-1951; A-25-1964
1951/2			&-46-50; &-13-1951; A-25-1964
1951/3	78	Kaplan 1959:7	&-46-50; &-13-1951; A-25-1964
1951/unknown			&-46-50; &-13-1951; A-25-1964
1952/Apse Cave			A-25-1964
1960		Kaplan 1961	
1964/1		Kaplan 1964; 1965	A-25-1964
1964/2	88, 89, 90, 97	Kaplan 1964; 1965	A-25-1964
1966	71; Inscription (Babaeis and Izikias)	Kaplan 1966a; 1967; Price 2003: no. 1	A-25-1964; A-501-1975
1972/1			A-340-1972
1972/2	5		A-340-1972
1972/3	66, 70; Inscription (<i>Tryphon son of Maris</i>)	Kaplan 1974a; b; d; Price 2003: no. 3	A-340-1972
1972/4	68		A-340-1972
1972/5			A-340-1972
1972/Tnuva Building	7, 72, 79, 86, 91	Kaplan 1974c; e	A-340-1972; A-501-1975
1976/11	1, 4, 87 (in probe near cave)		A-501-1975
1976/10			A-501-1975
1976/E	2, 6	Ajami 2006	A-501-1975
1976/F	25		A-501-1975
3 Caves on the north-west face of the hill			A-501-1975
1976/A	52, 94		A-501-1975
1976/B	80, 81, 85; Inscription (of Samoes)	Price 2003: no. 5	A-501-1975
1976/C	3, 8		A-501-1975
1976/D	13, 82, 95; Two inscriptions (of Nonnos and of the Cholbi-diads)	Price 2003: nos. 2, 4	A-501-1975
1976/2a	69, 83		A-501-1975
1976/2	55, 84		A-501-1975
Unrecognized Cave			46-1950-Kibuz Galuyot, Abu Kabir; A-25-1964-Kibuz Galuyot

Table 16.1. Caves and finds.

The first section describes all caves excavated by Kaplan and is organized according to years of excavation. The second section describes the finds from the hill and the caves of Abu Kabir. The caves and their finds are summarized in the table below (Table 1).

The Burial Caves of Abu Kabir

Kaplan uncovered more than 30 burial caves hewn into the *kurkar*. The cave complexes consist of small sunken (ca. 1.8 m below bedrock) vestibules (ca. 1.8 x 1.8 m) entered by a flight of stairs and opening into one or more small burial chambers that contain between 2 and 10 *loculi*. A few caves have *arcosolia* (never more than a single trough cut along the wall) and even fewer have large *loculi* that open directly into the vestibule.

The caves are generally described in the following order: vestibule; chamber; locus. The first chamber to be described is the one opposite the steps since it is always the first to be hewn; next the chambers are described, if possible, according to the order in which they were hewn. If not they are described from the largest to the smallest.

1950

In December 1950, the remains of *loculi* from two caves were discovered on the slopes of Abu Kabir. The exact location of these caves is unknown (Figure 1).

1951

At least two caves were excavated during this season. Their sketches are preserved in a field notebook. One of the cave plans (Cave 3) was published by Kaplan (1959:97, fig. 31, pl. 21 bottom).

Cave 1951/3123

This cave was probably located near the old Tel-Aviv University building (today The Nature School) at 155 Herzl St. (Figure 2). The cave consists of a front vestibule (w. 1.1 m, l. 1.2 m) sunk about 1.0 m below the rock surface, which was entered from the west over a flight of four steps (one step survived, three more are reconstructed in the plan). Three chambers flank the vestibule; the south (A) and east (B) chambers were found with stone slabs blocking the entrances, while the northern chamber (C) was found completely open. The roof of the cave was preserved only over Chamber A. Chamber B has a rectangular opening (w. 0.6 m) leading down over a step (l. 0.62 m, span 0.28 m, h. 0.7 m) into a rectangular hall (l. 1.95 m, w. 2.16 m) surrounded by six rectangular *loculi* (l. 1.75–1.85 m, w. 0.6–0.7 m, h. 0.8–1.0 m). In Loculus 6 a human skeleton was found. The entrance to Chamber A features an arched niche enclosing a rectangular opening (w. 0.6 m). Beyond the entrance there is one step (w. 0.6 m, span 0.3 m, h. 0.5 m) over which one descends to the trapezoid chamber (l. 1.75 m, max. w. 1.95 m, max. h. near the entrance 1.65 m) with two *loculi* on the south and two on the west. Two more *loculi* branch out on an east-west axis from the southern *loculi*. All the *loculi* are rectangular in shape, located about 0.5 m above the floor of the cave (l. 1.75–1.95 m, w. 0.6–0.75, h. 0.8–0.85 m). The northwestern and southeastern *loculi* (nos. 7 and 13) were found blocked with stone slabs. Chamber C, the least preserved of the three, has a rectangular entrance (w. 0.65 m) leading into it (w. 1.2 m, l. 0.95 m) sunk 0.6 m below the vestibule floor. It has three rectangular *loculi* located 0.25 m above the floor, two on the north and one on the south. The northern *loculi* (nos. 14 and 15) are of standard dimensions (w. 0.65 m, l. 1.8–1.9 m, h. 0.9 m), while the southern *loculus* (no. 16) is considerably shorter (l. 1.5 m) with a small step leading up to it.

¹²³ In the IAA folder (&13–1951) there is a list of items found in the cave: body shards of a ribbed storage jar and an ottoman coin; and in the vestibule: body shards of several storage jars, a 28 mm long copper nail and a 40 mm long iron nail. Only one nail remains.



Figure 16.1. Caves of December 1950. Loculi 1–2 of first cave found (right); loculi 2–3 of same cave (center); loculi of second cave found (left). Kaplan Archive.

Cave 1951 – Unknown

A second cave, found probably in 1951 in the same area, was completely destroyed by quarrying activity (Figure 3). But there remains the outline of a chamber (l. 1.35 m, w. 1.20 m) entered from the south (?) over a step (w. ca. 0.3 m, span 0.25 m, h. 0.25 m) surrounded on three sides by a ledge (w. 0.25 m, h. 0.5 m?) above which are 7 *loculi* (l. 1.7–2.0 m, w. 0.6–0.65 m). The left hand *loculus* in front of the entrance branches out to another *loculus*.

February 1952 – Apse Cave

This unique cave is cut into the face of a rock scarp on the hill east of the old Tel Aviv University building (Figure 4). The cave is composed of a single apse-shaped chamber containing at least four *loculi*. It is unclear whether or not the façade of this cave had collapsed.

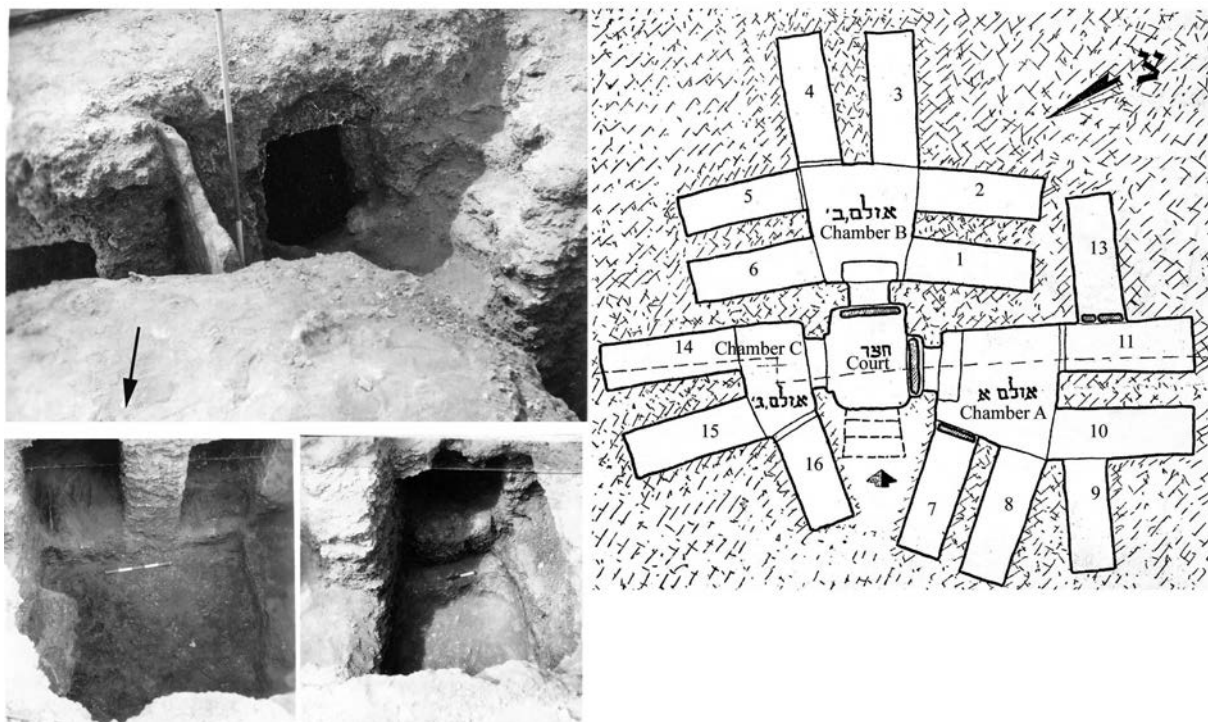


Figure 16.2. Plan of Cave 1951/3 (right); view from north on vestibule, stairs, and entrance to Chamber A (center of photo; top left); Chamber B, Loculi 5–6 (bottom left); Chamber C (bottom right). Kaplan Archive.

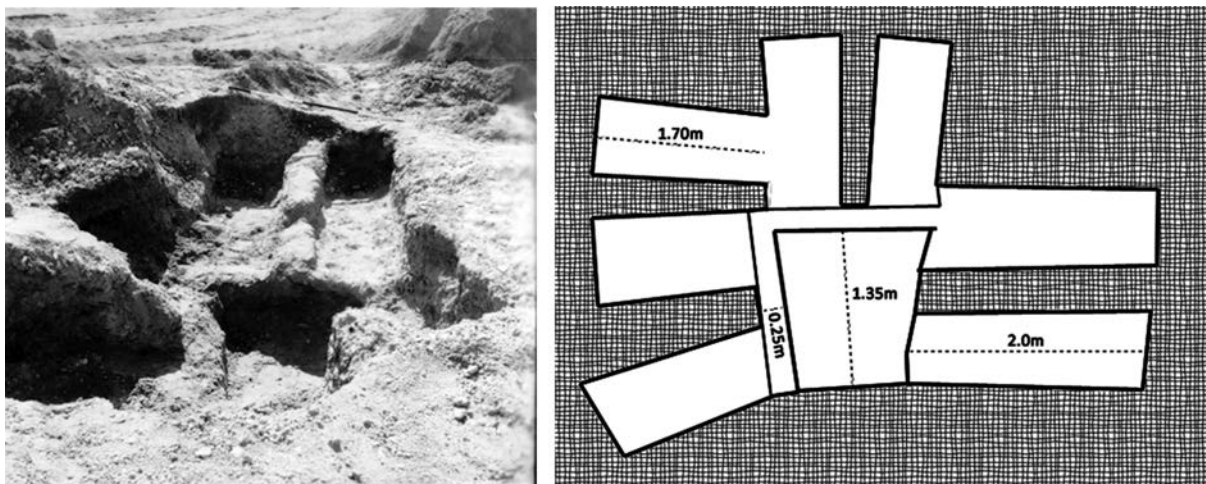


Figure 16.3. Plan of unknown 1951 cave according to notebook (right); photo of the cave during excavation (left). Kaplan Archive.

1960

A cave excavated near an electricity pole by the gate of the old Tel Aviv University building. No recognizable photos remain or data as to its layout.

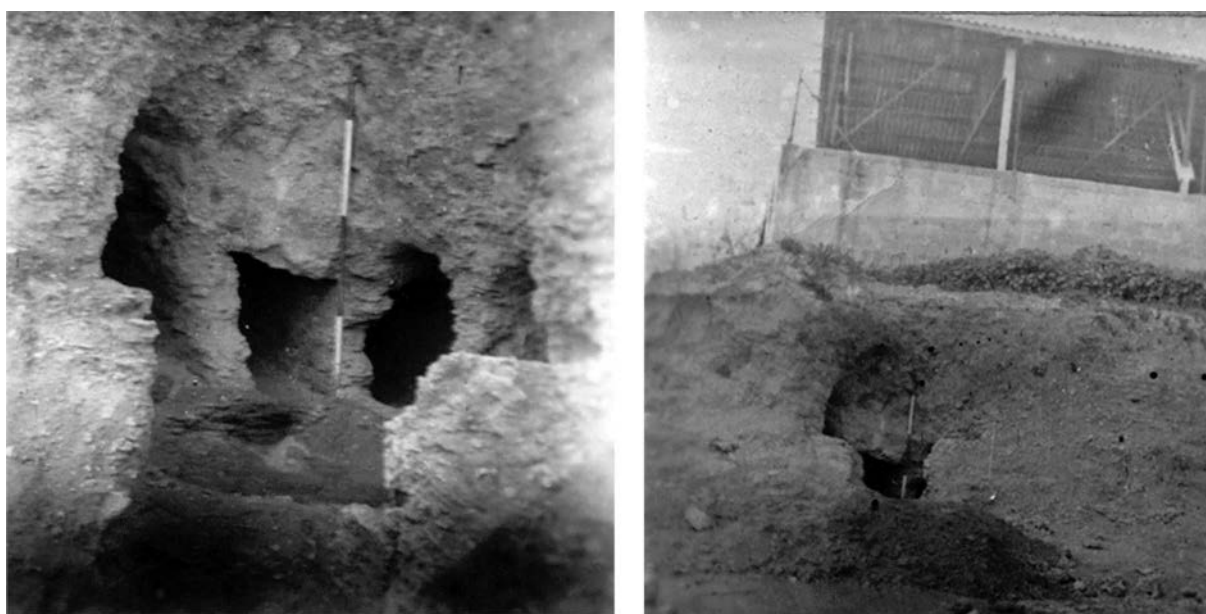


Figure 16.4. Apse cave, 1952. Close up (left) and general view (right). Kaplan Archive.

1964

Kaplan excavated two burial caves during a week in 1964 in the area of Herzl and Kibbutz Galuyot streets (Figure 16.5). The caves were cut into the *kurkar* and both were found to have collapsed. Although excavations did not yield many finds, Kaplan's drawings, summaries and field notes supply enough data to describe them in full.

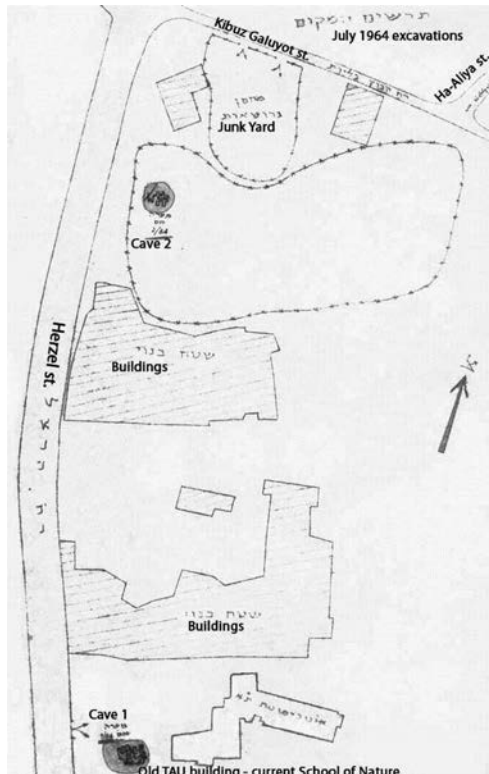


Figure 16.5. 1964 excavations. Drawing Y. Huri.
Kaplan Archive

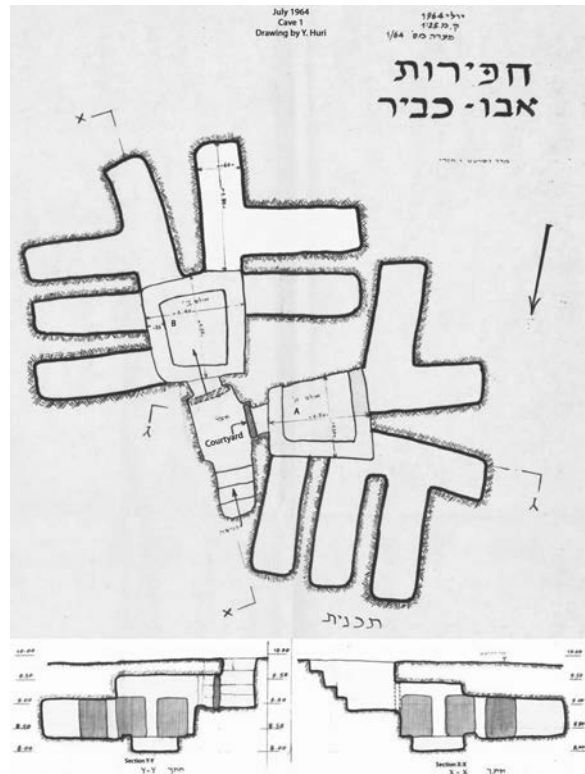


Figure 16.6. 1964 excavations. Drawing Y. Huri.
Kaplan Archive.

Cave 1964/1

Cave 1 was situated in the front lawn of what was then the compound of the Tel Aviv University and today The Nature School (Figure 6).

The cave is entered from the north via four uneven steps (w. 0.2–0.24 m, h. 0.25–0.35 m) that lead into a vestibule sunk about 1.5 m below the face of the bedrock. The vestibule is flanked on its south and west by entrances to two burial chambers. The southern entrance (w. 0.4 m, h. 0.6 m), found with its blocking stone shattered, leads into burial Chamber B: a rectangular hall (l. 1.5 m, w. 1.4 m, h. 1.45 m). Beyond the entrance the floor drops ca. 0.5 m to a ledge ca. 25 cm wide that surrounds the hall on all four sides. The center of the room is 0.5 m lower than the surrounding ledge. Above the ledge, five rectangular *loculi* are cut into the stone (avg. length 1.8 m, avg. width 0.6 m), two in the east wall, two on the south, and one on the west. Two more *loculi* are hewn on an east-west axis into the sides to the southern *loculi*. The western entrance (w. 0.4 m, h. 0.7 m), found blocked with a stone slab, leads into a rectangular burial Chamber A (l. 1.5 m, w. 1.3 m, h. 1.65 m). The hall is surrounded on three sides by a ledge ca. 0.25 m wide that is about 0.6 m lower than the entrance door step, and 0.3 m higher than the center of the hall. Above the ledge, four rectangular *loculi* are hewn (average length 1.8 m, average width 0.6 m, average height 0.85 m). Two more *loculi*, of similar dimensions and shape were hewn into the sides of the western *loculi* on a north-south axis. This cave yielded no finds other than crumbled human remains.

Cave 1964/2

Cave 2a was situated south of the southeastern corner of the intersection between Kibbutz Galuyot and Herzl streets (Figure 7). The burial cave was entered from the northwest through a small 1.5 m by 1.75 m vestibule sunk about 1 m below the surface of the *kurkar* bedrock. On the northeastern face of the vestibule was an entrance with the remains of only three steps (h. ca. 0.2 m, w. ca. 0.2 m) that lead into a burial chamber (w. 1.75 m, l. 1.5 m, with an estimated height of 1.3 m). Six rectangular *loculi* are carved into the walls of the burial chamber (l. 1.75–1.8 m, w. 0.55–0.6 m, h. ca. 1.5 m). The two eastern *loculi* were not excavated in full.

According to Kaplan's internal report to the IAA, the cave was cut into an earlier tomb, 2b, the vestibule of which were found on a lower level to the west, and two of its *loculi* preserved northwest of the vestibule in Cave 2a. The area between the two vestibules was left unexcavated due to safety considerations.

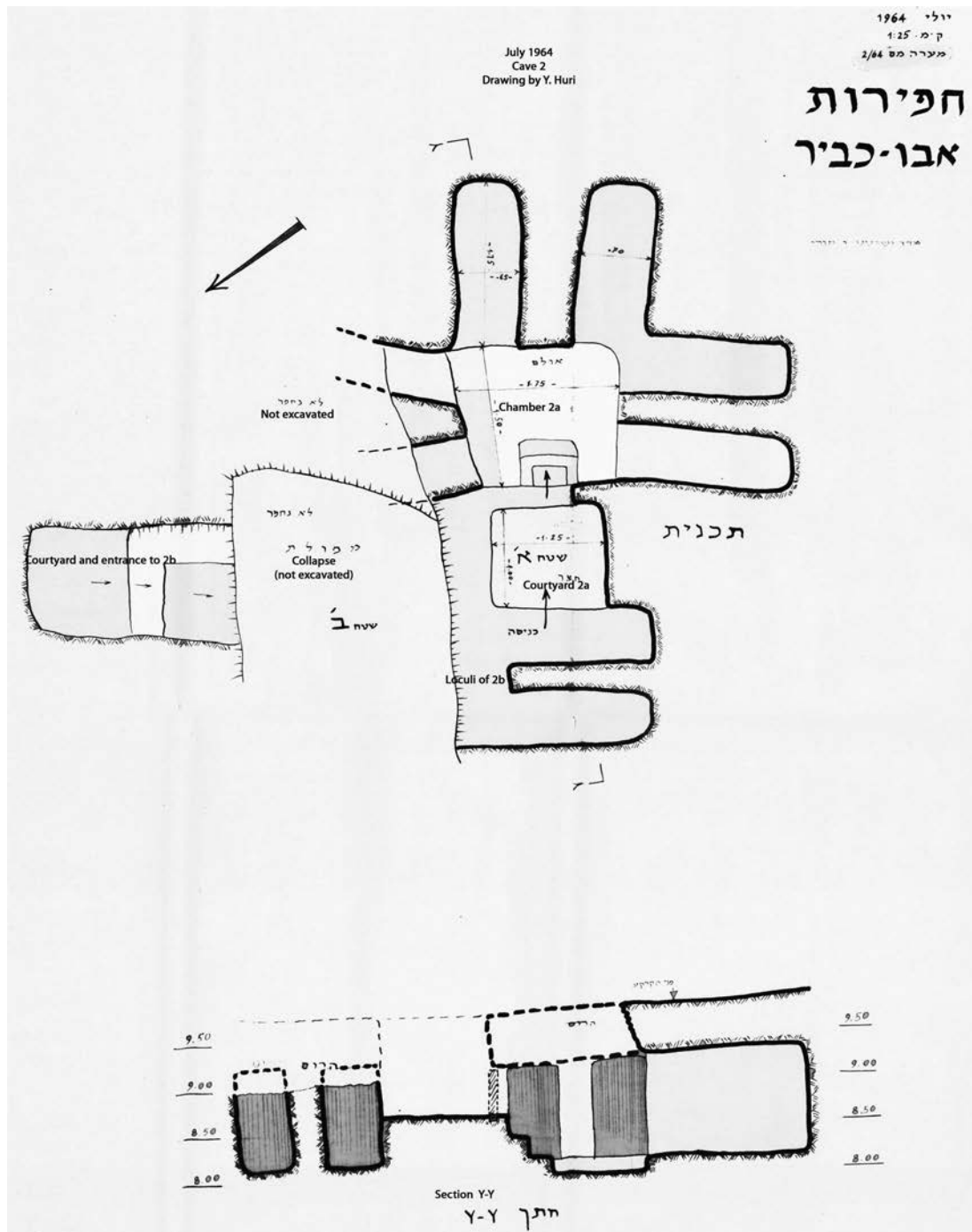


Figure 16.7. Cave 1964/2, plan and section. Kaplan Archive.

1966 – Tomb of Babaeis and Ezekias

A cave was discovered near the Moroccan synagogue “Ohel Moshe” at 135 Herzl St. Only a photo of the findspot of the inscription and the halved bag-shaped storage jar found next to it remains of this excavation (Figure 8).



Figure 16.8. Cave 1966, inscription as it was discovered (left), inscription and storage jar in vestibule as discovered (right); notice the sealed chamber on the left. Kaplan Archive.

Inscription on a lime stone slab (Figure 9)

Reg. No. 25/64/005; Cave 1966

Measurements: 42 x 21 x 4.5

The inscription was discovered face up on the floor of the tomb's vestibule (Kaplan 1966a:9; 1967:32).

Text and translation according to Price (Price 2003:no. 1):

Μν<η>μα διαφέροντ|α Βαβαειν και Έζικ|αν άνεψ(Μenorah)ιοΐς Έισακ Κ|ώζονος.

The tomb belonging to Babaeis and Ezekias, cousins (or nephews) of Isaac Kozon(?).

Date: 3rd–5th cents. CE



Figure 16.9. Cave 1966, inscription of Babaeis and Izikas, Kaplan Archive.

1972

During this season Kaplan exposed five burial caves on the south side of Kibbutz Galuyot St., along a stretch running west to east from the intersection with Herzl St. to the intersection with Ha'Aliyah St. (today this section of Ha'Aliyah St. is called Shocken St.) (Figure 10). Caves 1972/1 and 1972/2 were left unexcavated. According to the notebook, Cave 1 had *loculi* but also significant late intrusions. Cave 2 was re-used as a basement for a modern Arab building.

A “late Arab” tombstone was found. Its date, text, and current location are unknown.

The sketches reproduced here from the notebook were not drawn to scale. When possible, dimensions are given by approximation from photograph measuring sticks.

Cave 1972/3: Burial of Tryphon Son of Maris

This cave was discovered sealed (its roof was intentionally removed during excavation) (Figure 11). The burial complex is composed of a front vestibule (l. ca. 0.7 m, w. ca. 0.8 m) sunk about 1 m below the bedrock surface, entered from the east, possibly by three steps eroded with time. The front vestibule is flanked on the west and north by entrances to two separate chambers. On the south there is a single *loculus* opening directly into the vestibule (Loculus 11). According to the publication, all openings were found blocked. Chamber A (western chamber) is a rectangular room (ca. 1.5 x 1.5 m) entered through a small opening (h. ca. 0.5 m, w. ca. 0.4 m), and its floor is sunk ca. 0.5 m below the doorsill without approaching steps.

There are 5 *loculi* hewn into the northern and western walls (*loculi* nos. 1–4 and 6), while in southern wall there is an *arcosolium* (no. 5) with a single trough cut into it (seemingly very short, ca. 1.5 m).

The northern Chamber B has a rectangular entrance (h. ca. 0.5 m, w. ca. 0.4 m), and is a small rectangular room that curves a bit on its north (l. ca. 1.2 m, w. ca. 1 m). The floor is sunk about 0.5 m below its doorsill. Two *loculi* are hewn into its northern wall (nos. 7, 8) and two into its eastern wall (nos. 9, 10). On the southern wall of the vestibule there is another *loculus* with an opening of about 0.6 x 0.6 m, but its length is unknown. It was excavated and found empty.

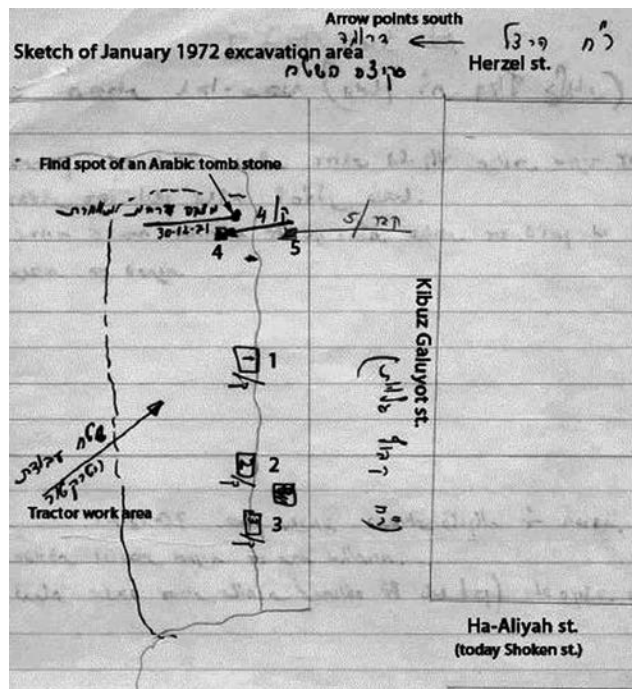


Figure 16.10. Sketch of January 1972 excavation area from the field notebook. Kaplan Archive.

Inscription – Limestone Slab (Figure 12)

Reg. No. 340/72/002; Cave 1972/3, Bucket 1

Measurements: 32 x 30 x 3 cm

The following inscription:

μνημα Τρύφωνος υει|οῦ Μαρῖς | Ἀλεξανδρέ|ος Διαβεν|α.

Memorial of Tryphon son of Maris the Alexandrian, from Adiabena (?)

It was found face down, on the southern side of the vestibule, near the solitary *loculus* (no. 11), 75 cm below the face of the rock, which means it was about 15 cm above the floor of the vestibule. The findspot, position, and dimensions suggest that the inscription was fastened to the face of the rock above Loculus 11.

Parallels: Kaplan 1972/3:35–36; Price 2003:no.3.

Date: 3rd–5th cents. CE

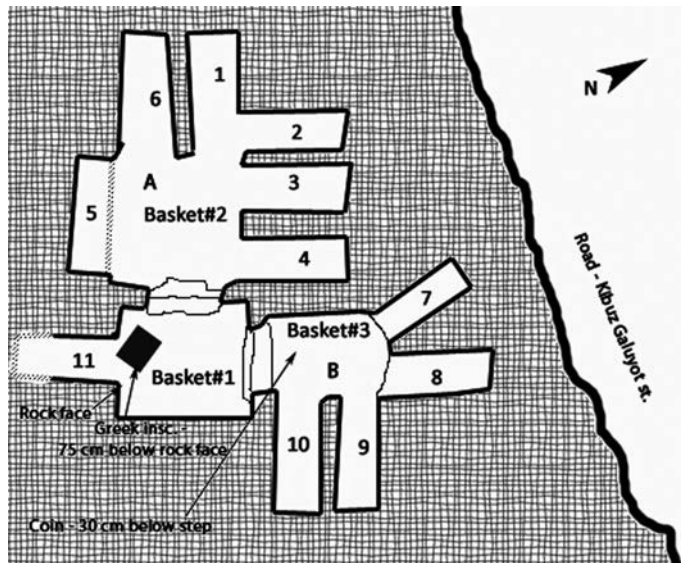


Figure 16.11. Sketch of Cave 1972/3 from field notebook. Kaplan Archive.



Figure 16.12. Inscription of Tryphon son of Maris from Cave 1972/3. Kaplan Archive.



Figure 16.13. Cave 1972/4. Posts and lintel from within (left) and vestibule and chamber looking northwest (right). Kaplan Archive.

Cave 1972/4

This cave was found on the western edge of the 1972 excavation area, close to the intersection between Herzl and Kibbutz Galuyot St. (Figures 10 and 13). There are not enough photographs to reliably approximate its dimensions, but it is possible to say that they are generally similar to the dimensions of the other caves already described. The roof of the chamber collapsed and the tomb itself was not sealed.

According to the field notebook sketches and the photographs, a set of three steps from the northeast leads to a vestibule which opens into three burial chambers: on the north-west, southwest and southeast. It seems that only the northwestern burial chamber was excavated. It had a built-in posts and lintel of well-cut building

stones fitting nicely into the hewn rock. The inner part the lintel has drilled socket made so as to fit the hinges of a door, which was not found. A broken blocking stone was found in front of the entrance. The entrance leads over two steps into a rectangular chamber with four *loculi*: two on the northwest wall and two in north-east.

Cave 1972/5

This cave is located to the north of Cave 4 and adjacent to it (Figure 14). The field notebook does not give much information about it, and it might have been hastily excavated just enough to understand its plan. A sketch in the notebook shows the cave complex to be of a vestibule with a single entrance to the west, leading to a small chamber with two *loculi* hewn in the south wall and two on the west each of which branches out to two more *loculi* on a north-south axis. It is possible that the vestibule was not completely excavated and the thus other entrances were not discovered.

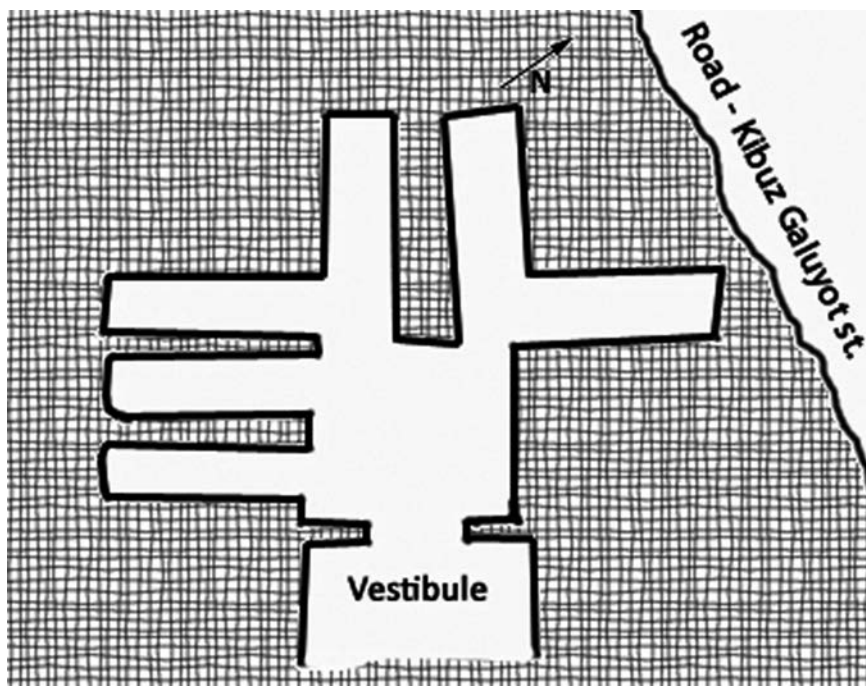


Figure 16.14. Cave 1972/5, sketch from field notebook. Kaplan Archive.

1972 – Corner of HaTehiya and Herzl Streets – The Tnuva Building Cave

In October 1972 Kaplan excavated a burial cave on the corner of HaTehiya and Herzl St.¹²⁴ across the street from where he had previously excavated Cave 1964/1 (Figure 15). The cave was discovered during the digging of foundations for a new building. According to the publication (Kaplan 1974c; 1974d) the complex had a vestibule opening into three burial chambers, with ten, six, and three *loculi* in each. From the photos it is possible to add that the chamber in front of the entrance to the vestibule had a built-in posts and lintel and was discovered blocked by a semi-round large stone. The chamber on its left (for the one facing the mentioned entrance there is not enough data to give absolute directions) was discovered under a collapse of large building stones. According to Kaplan, no finds were recovered in the *loculi* of this complex. Nonetheless there are several finds described as coming from the “Tnuva Building” in the Jaffa museum storage rooms, but none were found directly in the *loculi*. The importance of this tomb, as mentioned by Kaplan, is that it is the most western tomb of the necropolis discovered and excavated and may mark its western boundary since it lies only about 20 m east of the ancient shore of Jaffa’s large swamp (Ar. *el-Bassa*), which prevented expansion of the cemetery westward.

¹²⁴ I would like to thank Ms. Eti from “Tnuva” customer services for confirming the location of the “Tnuva” company property on this intersection.

1975–76

In February 1975 Kaplan renewed excavations on the strip south of Kibbutz Galuyot St. running east to west between the intersections of Herzl and Ha'aliyah streets and on the hill to the south. In 1976 the excavation was managed solely by Ritter-Kaplan. Only a page of the 1975 season field notebook remains. Other than this, the finds with their tags and some photos were kept in the Jaffa Museum and the IAA Rockefeller archives (Permit A-501/1975). From 1976 there remains only Ritter-Kaplan's field notebook, tagged finds, photos, and some plans. A total of 12 caves were excavated in this season, 5 caves on the hill (caves 10, 11, E, Ea, F) and 7 (caves 1, 2, 2a, A, B, C, D) at its foot, south of Kibbutz Galuyot St. Three more caves were discovered on the northwestern slope of the hill, one of which was briefly explored and the rest were left without inspection.

The exact location of the caves on the hill is unknown, since the general plan of the excavations is no longer in hand (the field notebook mentions in passing that Y. Huri and J. Kaplan have prepared such a master plan). Photographs allow for the general location of the tombs at the foot of the hill, and passages from the field notebook hint at the location of the caves on the hill.

1975–76 – Caves on the Hill

Cave 11

This cave was the first to be excavated in May 1976 (Figure 16). Its exact location is unknown. It is highly probable that it was located on the hill behind the synagogue on 135 Herzl St. The cave was found with a portion of its roof collapsed or quarried. It is comprised of an elongated rectangular front vestibule (about 1 m wide) leading into a single chamber. According to the notebook, the chamber is on the west flank of the vestibule and has three *loculi* on the north, three on the east and two on the south. The eastern *loculus* on the south branches out of the southeastern *loculus*. The entrance to the chamber (about 0.5 m wide) was found blocked, and one of the stones of the blockage is said to have borne an epitaph, but the current whereabouts of this inscription is unknown. In front of the blockage, in the front vestibule a pile of storage jars was found (see pottery section). Photos do not allow for any further measurements.



Figure 16.16. Cave 11 (1976) entrance, looking east. Notice the storage jar fragments in the fill of the vestibule, the rectangular loculi, and the two stones blocking the original entrance. Kaplan Archive.

Cave 10

This cave was discovered directly to the west of Cave 11 also in May 1976 (Figure 17). It was almost completely erased by quarrying, and only the contours of a chamber (w. 0.6 m, l. 1.5 m) with two *loculi* in the west wall (w. 0.6 m each, l. approx. 1.5 m) and one *loculus* on the north can be seen. The excavators did not seem to connect Caves 11 and 10 together, and mention that it is unknown if this cave was ever roofed. Cave 10 may have been an eastern chamber of Cave 11 destroyed by 19th century quarry activity.

A set of four stairs was discovered cut into the rock scarp adjacent to the southwestern *loculus*. The stairs lead to a rock scarp south of the cave. The function of the rock scarp and stairs is not clear (no photos or clear plans exist) but they were cut into Cave 10 at a later phase.



Figure 16.17. Chamber and the two western *loculi* of Cave 10. There is no photo of the northern *loculus*. Notice the stairs on northwest of the right hand *loculus*. Kaplan Archive.

Cave E

This cave is on the northeastern slope of the hill south of Kibbutz Galuyot St. (NIG 178545/662024) (Figure 18). It was re-excavated by Moshe Ajami (Ajami 2006) (Figure 19). The cave was found without a roof (only the *loculi* were covered), dug into by 19th century buildings, whose foundations were found starting from the chamber floor. The vestibule of this cave is a small 0.7 x 0.7 m square located on the north side about 1.6 m above the cave floor. The chamber has a trapezoid outline and on its south side three larger than usual vault-shaped *loculi* (h. 0.8–0.9 m, w. 1–1.1 m, l. 2.05–2.3 m) and two *arcosolia* along its eastern and western walls (the eastern *arcosolium* had a trough reconstructed at 1.75 m and an arch 1 m high). A fourth *loculus* is suggested by Ajami’s plan on the northwestern wall. A “bench” about 0.5 m wide and 0.3 m high encircles the center of the chamber. This may be a bench from the original cave or a remnant of the original floor after 19th century buildings were cut into it. The bottoms of the *loculi* and of the western *arcosolium* are at the same altitude as the “bench,” while the eastern *arcosolium* is raised about 0.5 m above it. The *arcosolia* seem rather small and may have been used as bone repositories. The level of preservation of this cave does not allow for any definite conclusions. During Ajami’s excavation some “poorly preserved” human remains collected from the fill belonged to at least four individuals, three adults, and one child (Ajami 2006).

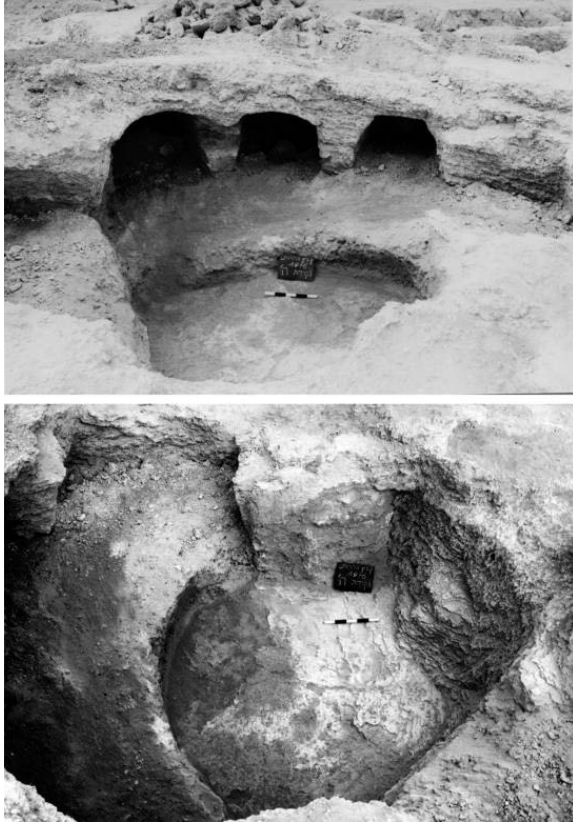


Figure 16.18. Cave E to the south (top) and from above westward (bottom). Notice the rock ledge on the north wall and the circular carving of the floor. Kaplan Archive.

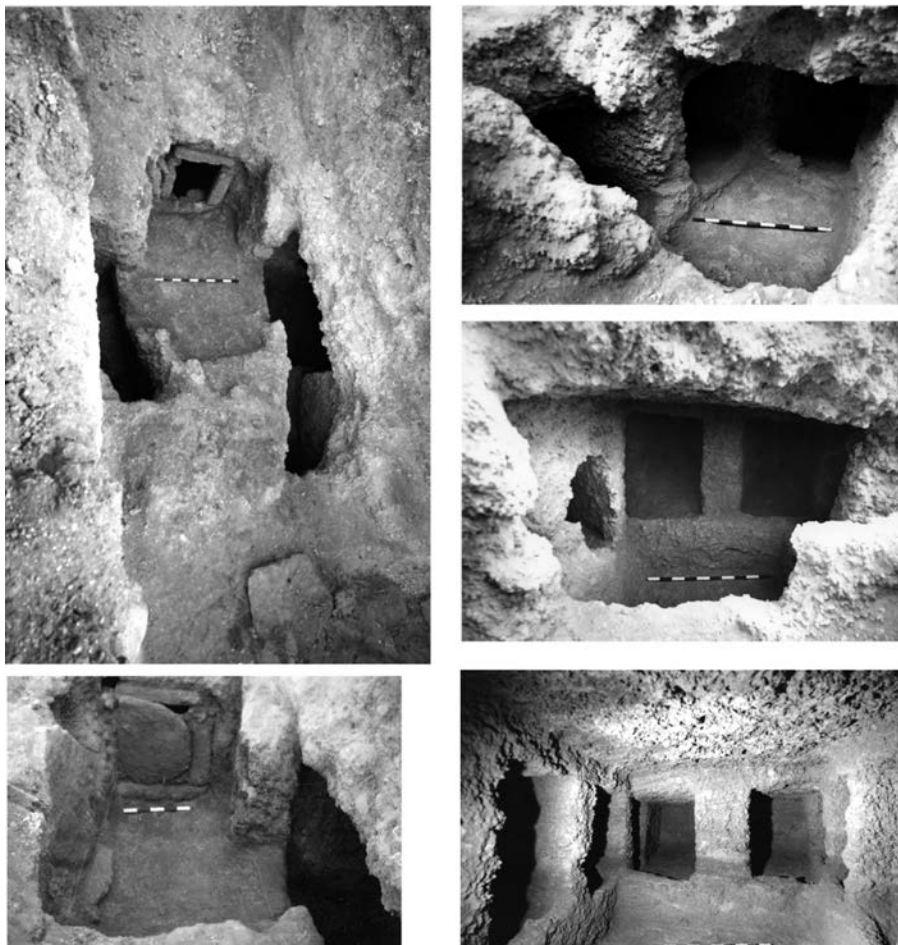


Figure 16.15. Photos of the Haṭṭiyah/Herzl St. cave. General view of vestibule and entrances (top left); “left hand” chamber with three loculi (top right); “right hand” chamber with six loculi (below); middle chamber with ten loculi (bottom right); vestibule and entrances as discovered (bottom left). Notice the collapse over “left hand” entrance. Kaplan Archive.

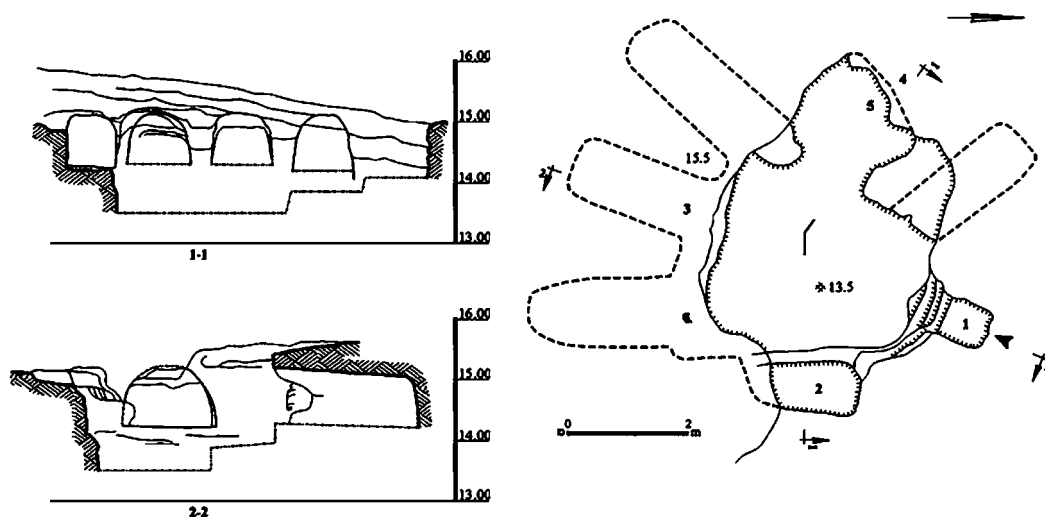


Figure 16.19. Plan and sections of Cave E according to Ajami 2006.

Cave F

This cave was discovered near the bottom of the southeastern slope of the hill (Figure 20). It was almost completely erased by later quarrying and by a collapse of the slope itself. It has a trapezoid chamber with four *loculi*, two on the eastern and two on the western walls. It was probably entered from the north, the narrow end, where a single step was discovered about 1 m below the current rock surface. A closer look at the photo reveals the remains of a doorpost above the northern wall. A narrow, low ledge carved all along the southern wall may indicate that *loculi* were carved here too.

According to the field notebook, the workers found and broke what Haya Ritter-Kaplan called a “tombstone” in this cave. This stone was discarded by them and she went looking for it in the dump, but did not find it. This was probably not an inscription bearing tombstone (she named stone slabs at the entrances of caves a *matsevah* [מצבה], meaning “tombstone”).

Cave Ea

The cave was found on the top of the hill between caves E and F beneath the ruins of the “Arab building,” a 19th century building of the Abu Kabir neighborhood (Figure 21). This cave was also erased by quarrying. It seems that only the rectangular outline of its chamber was discovered, but most probably its excavation was not pursued.

Caves on the Northwestern Slope

Three more ruined caves were discovered somewhere on the northwestern slope of the hill south of Kibbutz Galuyot St. (Figure 22). One of them was explored and basically described by Haya Ritter-Kaplan in her notebook. The cave had an opening facing north, covered by traces of plaster. From the entrance, two steps lead into a chamber confusingly described as having “three large *arcosolia* and in each a shallow *arcosolium*” – perhaps an arrangement similar (but much smaller) to caves in Beth Guvrin, which contain large *arcosolia* with single troughs above which smaller *arcosolia* are carved in the wall as bone repositories (Avni, Dahari, and Kloner 2008:42, Cave I.30, fig. 2.60).



Figure 16.20. Cave F: view to northeast (top), and view to north (center). Notice trapezoid contour of chamber. Reconstruction of Cave F by H. Ritter Kaplan (below), looking north.

Caves on the Roadside

In the 1975–76 excavations, eight caves were found and excavated on a kurkar plateau at the foot of the hill south of Kibbutz Galuyot St. spanning the length between Herzl and Ha'aliyah streets (Figure 23). This excavation area is a continuation of the area excavated on the same stretch of land in 1972, over which Kibbutz Galuyot St. was paved. Caves A to D were cut into a rock scarp, which may have been intentionally leveled for them.



Figure 16.21. Chamber outline Cave Ea as exposed. Kaplan Archive.



Figure 16.22. Three ruined caves on the northwestern slope. Kaplan Archive.

Cave A

The easternmost cave excavated in this area, which is composed of a square vestibule, is entered by four steps descending from the west (Figure 24). The vestibule is flanked by chambers to the east and to the north. The eastern chamber (*loculus 4*) was found open, its blocking stone thrown face down on the vestibule floor, its roof intact, and it contained 10 *loculi*. The northern chamber (*loculus 5*), with its entrance sunk within a rectangular frame that cuts into the two bottom steps of the vestibule entrance, was discovered blocked up. Its roof was broken (notice the breach north of Cave A in fig. 26) and it contained 6 rectangular *loculi*. Debris consisting of modern concrete was found inside.

There are no measurements and also the exact layout of the *loculi* in the chambers is unknown.



Figure 16.23. Caves on the roadside A–D and 1&2. View to the west. Kaplan Archive.



Figure 16.24. Isometric drawing of Cave A by H. Ritter-Kaplan looking north (left) and northern chamber of Cave A (right). Kaplan Archive.

Cave B – The Tomb of Samoos

This cave is located a few meters to the west of Cave A (Figure 25). It consists of a square vestibule (l. 1.14 m, w. 1.15 m), sunk about 1.3 m below the rock surface. The vestibule is entered by a flight of four steps on the west (h. of each step 0.3 m, span 0.2–0.3 m, w. 0.9–1.0 m, bottom step width 0.3 m). Two entrances flank the vestibule on the south (h. 0.6 cm, w. 0.5 m) and on the east (h. 0.68 m, w. 0.58 m) both were found sealed with stone slabs. The eastern chamber consists of a trapezoid hall sunk 0.5 m from the vestibule (h. 1.27 m, w. 0.6 m, l. 1.0 m) opening into two rectangular *loculi* on the east and one on the south about 0.4 m above its floor (avg. measurements: l. 1.75 m, w. 0.5 m, h. 0.55 m). The southeast *loculus* branches out into another *loculus* on a north-south axis. The northeastern *loculus* is wider and oddly shaped while the rest of the *loculi* are well carved. The blocking stone of the south entrance stood over a lying stone slab that served as a doorsill. The southern entrance leads to a very narrow and low space, either defined as a large double *loculus* or a very small chamber. Immediately beyond the entrance a small space (l. 0.15 m, w. 0.5 m, h. 0.8 m)

continues into a *loculus* on the south (h. 0.75 m, w. 0.6 m, l. 1.7 m), which branches out into another *loculus* to the west (h. 0.75 m, w. 0.58 m, l. 1.65 m).

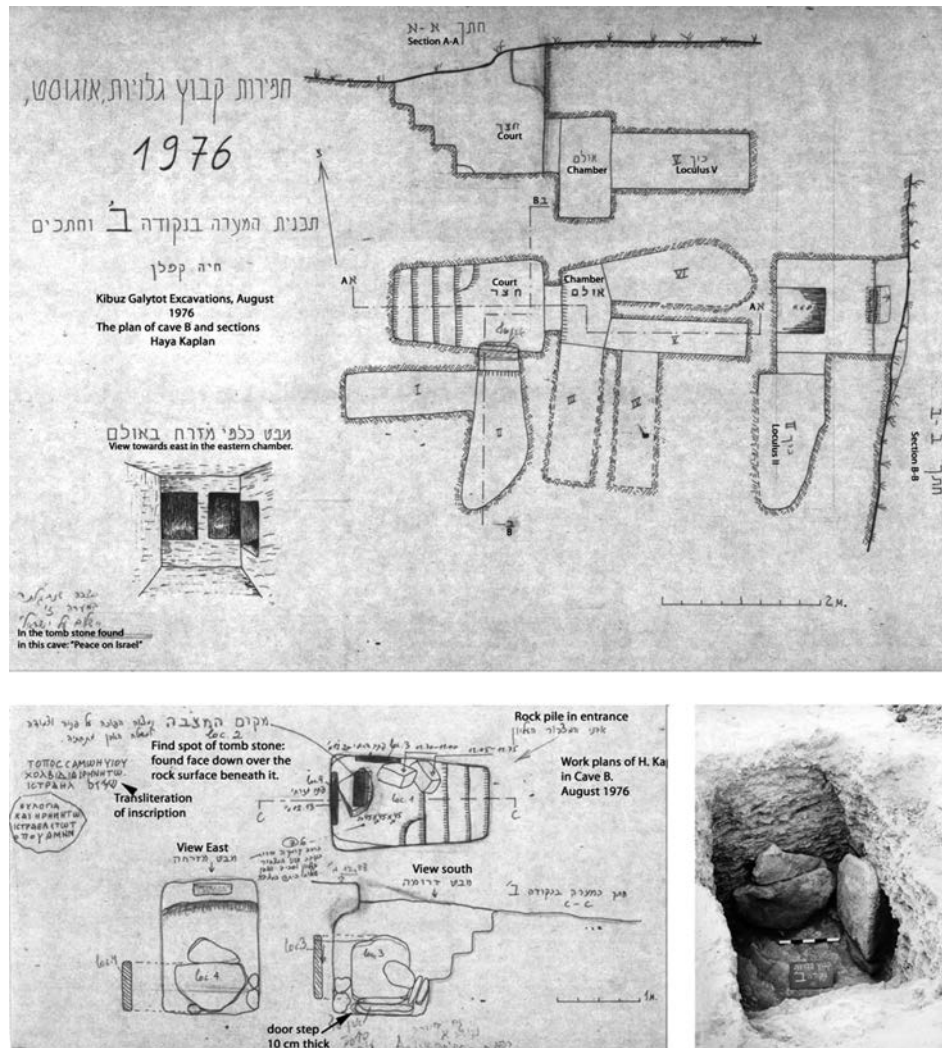


Figure 16.25. Plan and sections of Cave B by H. Ritter-Kaplan (top). Notice reconstructed location of inscription. Work plan and sections of Cave B by H. Ritter-Kaplan (bottom left). Photo of vestibule and entrances of Cave B (bottom right). Kaplan Archive.

Inscription – Limestone slab (Figure 26)

Reg. No. 501/76/003; Cave 1976/B

Measurements: 46.5 x 19 x 3

Limestone. The inscription was found turned face down over a pile of rocks that was dumped into the vestibule. Haya Ritter-Kaplan was able to reconstruct the original location of this inscription according to its findspot and position as coming from above the entrance to the eastern chamber.

Text and translation according to Price (2003:no. 5).

Τόπος Σαμώη υιοῦ | Χολβιδία. Ἰρήνη τῷ | Ἰσραήλ ἰομω

This is the tomb of Samoēs son of Cholbidias (?). Peace on Israel. Peace
Date: 3rd–5th cents. CE

Cave C

This cave is located west of Cave B and was only defined but not excavated. A natural cist was opened and a modern (19th century) cesspool was carved in the rock above this cave. Although the tomb itself does not

have a plan, a clear photo or even a description, some important finds were found in the rock cuttings above it.



Figure 16.26. Inscription of Samoës son of Cholbidias(?) from Cave 1976/B. Kaplan Archive.

Cave D

This cave, west of Cave C, has no plan (other than a sketch of the vestibule) but has many photos (Figure 27). It is plausible that its arrangement is very similar to that of Cave A which also has 10 and 6 *loculi*. Cave D is entered via four steps (span 0.3 m) leading from the east into an elongated vestibule (l. 1.4 m, w. 1.0 m) sunk about 1.6 m below the rock surface. Openings flank the vestibule on all three sides: On the west a large stone slab blocked an entrance leading over two steps down into a chamber (Loculus 6) encircled by a 0.5 m high narrow ledge above which are 10 vault-shaped *loculi*: 3 on the north, 3 on the south, 2 on the west, and branching out to 2 more on a north-south axis. On the north, there were two small openings to 2 *loculi*, the northeastern one blocked with a fitting stone slab and the northwestern found open and full of dirt. The southern entrance was carved within a niche, similar to Cave A, leading over a step (h. 0.5 m) down into a chamber sunk 1.0 m below the vestibule and containing 6 vault shaped *loculi* built 0.5 m above the floor: 2 on the east, 2 on the south branching out to 2 more on a north-south axis.

Both chambers had breaches in their ceilings and were used as cesspits for the 19th century neighborhood of Abu Kabir. The excavators removed the entire ceiling from both chambers.

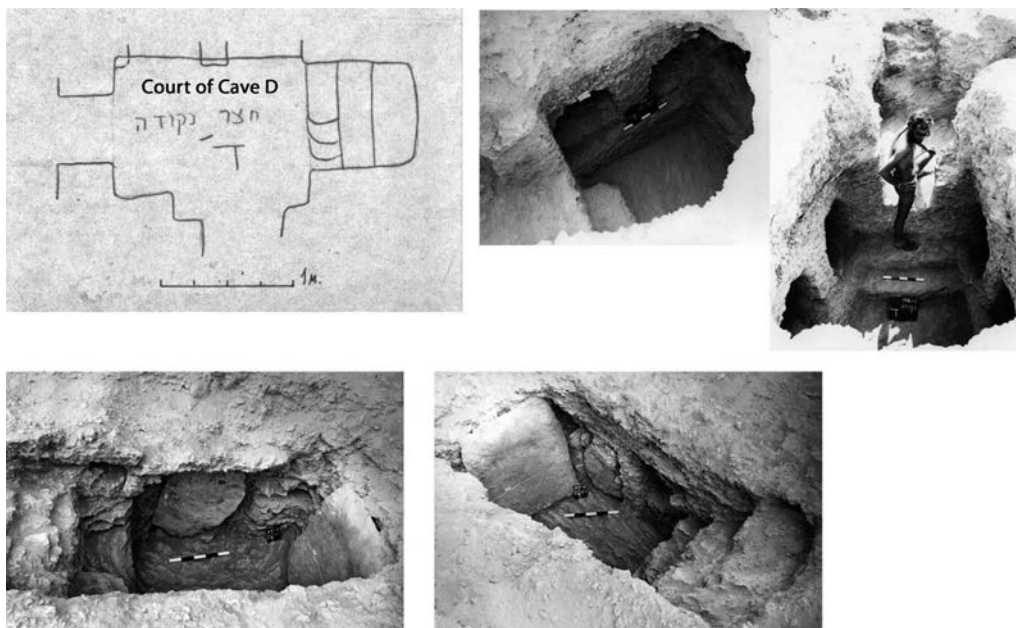


Figure 16.27. Sketch of vestibule of Cave D by H. Ritter-Kaplan (top left), its south chamber (top center), its west chamber (top right), and vestibule of south and west chambers (bottom left), and vestibule, west chamber and northern loculi opening into the vestibule (bottom right). Kaplan Archive.

Inscriptions – Limestone slabs (Figure 16.28)

Reg. No. 501/76/002 (Figure 30); Cave 1972/D

Measurements: 21.5 x 50 x 5 cm

Arched limestone slab. Found by Ritter-Kaplan in August 1976, by the entrance to the western chamber.

Text and translation (Price 2003:no. 2):

Τόπος τὸν ἠγόρασα | ἐγὼ Νόννος (palm leaf)

This is the burial place which I, Nonnos, bought.

Date: 3rd–5th cents. CE



Figure 16.28. Inscription of Nonnos from Cave 1972/D. Kaplan Archive.

Inscriptions – Limestone slabs (Figure 16.29)

Reg. No. 501/76/001; Cave 1972/D, Bucket 34

Measurements: 22 x 22 x 2.5 cm

Limestone slab, found in situ by Kaplan in May 1976, attached with plaster to the southern vestibule wall (Locus 23).

Text and translation (Price 2003:no. 4):

Τόπος Ιακώδης υἱοῦ Ὀλυμπίου Ἀλεξανδρέος Κοχάδων ἔ(των) ΕΓ | (Palm leaf and Ivy leaf)

The tomb of Iakodes (?) son of Olympios the Alexandrian, of the family of the Kochadoi, 63 years old.

Date: 3rd–5th cents. CE



Figure 16.29. Inscription of Iakodes son of Olympios from Cave 1972/D. Kaplan Archive.

1976 – Caves at the Intersection of Herzl and Kibbutz Galuyot Streets

Three caves (1, 2, 2a) were discovered in the southeastern corner of the intersection between Herzl and Kibbutz Galuyot streets, west of Cave D. Their exact location relative to one another is unknown.



Figure 16.30. Vestibule and sealed, southern chamber entrance of Cave 1976/1. Kaplan Archive.

Cave 1976/1

Cave 1 is entered from the north via six stairs descending into an elongated vestibule (such as Cave B) (Figure 30). The vestibule is flanked by entrances on three sides. The side openings (west and east) were found breached, while the south opening (in front of stairs) was discovered with a massive blocking stone (h. 0.95 m, w. 0.8 m) stuck in situ with plaster. The *loculi* within the chambers are vaulted (as in Cave D), but it is not clear how many there were in each chamber. The southern chamber was discovered empty of dirt, with two *loculi* sealed with a stone. Although plans were drawn up by Haya Ritter-Kaplan, their current whereabouts is unknown.

Cave 1976/2a

This cave is located in the vicinity of Cave 1 (Figure 31). It was first called Cave 10 by Jacob Kaplan, who excavated and covered it in 1975. In 1976 it was uncovered once more by Haya Ritter-Kaplan. The cave consists of a square vestibule with one entrance on the west. The entrance has built-in posts and lintel (w. 0.7 m, h. 0.6 m, d. 0.27 cm) and was found blocked on the outside by two stone slabs. From the entrance, one descends over two steps (top step: span 0.2 m, h. 0.1 m; bottom step: span 0.3 m, h. 0.3 m) into a square chamber (ca. l. 1.5 m, w. ca. 1.5 m) containing 4 *loculi*, 2 on the west (numbered 1–2 south to north) and two on the north (numbered 3–4 west to east). At the foot of Loculus 4 there is a hewn rectangular pit that may have been a bone repository. According to the photos, it seems that the *loculi* were vaulted. There is a drawing by Haya Ritter-Kaplan, labeled “Cave 2a” but this drawing appears to correspond better with Cave 2 and not 2a (see Cave 1976/2).

Cave 1976/2

This is the last cave excavated in the 1976 season (Figure 32). All that is known of it is that it had at least two chambers; on the east, containing *loculi* 0.5 m above the floor and maybe an *arcosolium* on the south, and an unexplored chamber on the south. The vestibule was much damaged due to a modern Arab well that was dug as a square shaft into its center (the drawing labeled “Cave 2a” fits the descriptions in the field notebook). Walls from the upper modern buildings ruined the top part of the blocking stone of the south entrance. By the southern entrance fragments of an inscription were found, but their current location is unknown. According to the field notebook it was a corner and had two lines on it, which Haya Ritter-Kaplan did not identify.

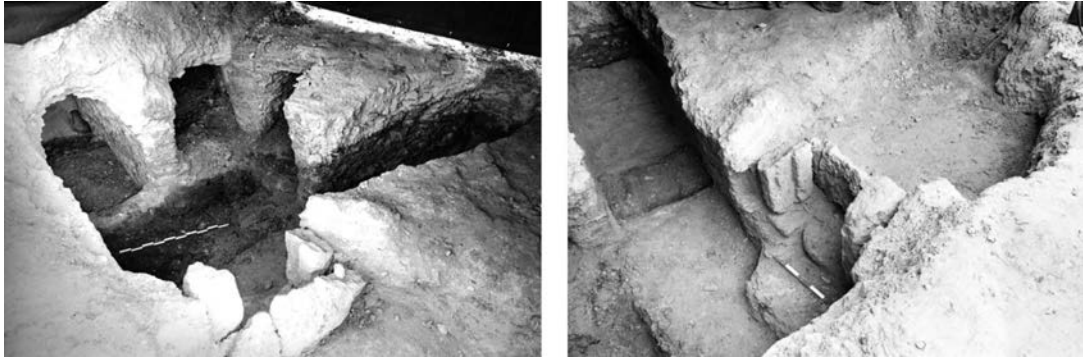


Figure 16.31. Cave 1976/2a, view toward west (left) and toward east onto the vestibule (right). The photos were taken in 1975. Kaplan Archive.

Unrecognized Cave

The albums in the IAA archives contain a few other photographs of caves, mostly unexcavated. One cave stands out (Figure 33). It seems that it contained one chamber with six *loculi* and was entered via a shaft. This is a conjecture based only on the photo numbers. It should be mentioned that it is not even clear if this cave was excavated in 1961 or 1950, for its photos appear in both IAA folders (46–1950–Kibbutz Galuyot, Abu Kabir; A–25–1964–Kibbutz Galuyot).

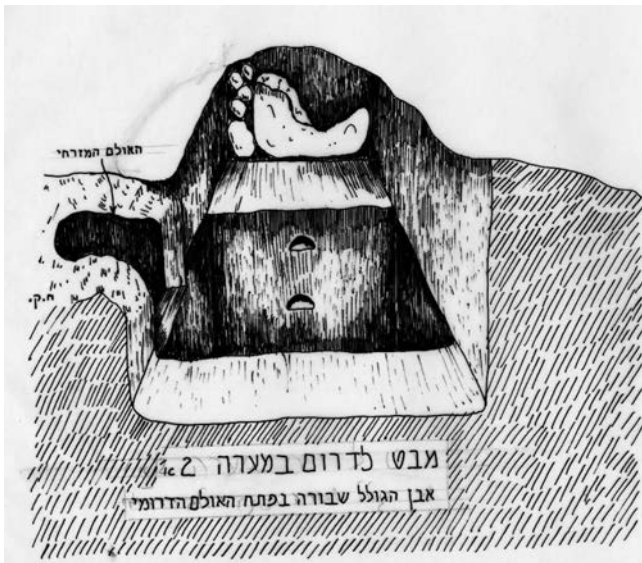


Figure 16.32. Cave 1976/2, drawing by H. Ritter-Kaplan. View to the south. Notice the square shaft dug into the vestibule of the cave. The drawing is labeled 2a, but in the field journal the cave with the shaft in its vestibule is 2, thus my current numbering. Kaplan Archive.

The Pottery¹²⁵

The excavations on and around the Abu Kabir hill yielded a pottery assemblage of two distinct periods: the Byzantine period (extending into the Early Islamic period), mainly fourth to seventh centuries CE, and the Ottoman period, probably starting in 1831 when the first Egyptian settlers established the neighborhood of Abu Kabir, and ending in 1948. The distinction between the two periods within the pottery assemblage enables us to relate the Byzantine pottery to the time of cemetery activity.¹²⁶

¹²⁵ I would like to thank Anna De-Vincenz for sorting the entire Abu Kabir pottery with me, and for helping and teaching me on every step of the way. I would like to thank Orit Tsuf and Barbara L.: Johnson for going over the assemblage as well.

¹²⁶ Much has also been updated regarding Ottoman perhaps the most important publication is B.J. Walker (ed.), *Reflections of Empire: Archaeological and Ethnographic Studies on the Pottery of the Ottoman Levant*, ASOR 64, Boston–MA, 2009; esp. chapters 2 (by M. Avissar) and 3 (by M. Abu Khalaf). Regarding clay tobacco pipes see: A. de Vincenz, “Ottoman Clay Tobacco Pipes from Ramla,” *Atiqot* 67, 2011, pp. 43*–53*; L.: Sabbionessi, A. de Vincenz and S. Gelichi (edd.), *Bere e fumare ai confini dell'impero : caffè e tabacco a Stari Bar nel periodo ottomano*, Firenze, 2014; Ottoman assemblages have been published recently by IAA archaeologists (*exempli gratia*): M. Avissar, “Excavations at Beth-She'an (youth hostel),” *Atiqot* 77,

The Byzantine assemblage contains rims of bag-shaped storage jars, amphorae, and an inscribed candlestick/lychnaria/slipper type oil lamps. Since none of the pottery was found in a clear stratigraphic context, it was decided to present it typologically and separate from the caves. The assemblage is represented here in its entirety.

The Ottoman assemblage is rich, containing glazed and plain bowls (both of local and foreign manufacture), coffee cups, tobacco pipes, storage jars, and juglets. It represents the life within the village/neighborhood of Abu Kabir. Only selected types of Ottoman pottery are represented so as to reflect the entire assemblage. The provenance of the Ottoman pottery is mentioned in the text in the few cases when it is clearly known. Since the architectural contexts of these sherds are unrecorded, and they were present in almost every locus in the site, the specimens were chosen solely on a typological basis.

A third class of pottery, deigned “miscellaneous,” contains a possible kerosene lamp, several unidentified juglets, re-shaped/re-worked sherds and a medieval amphora.

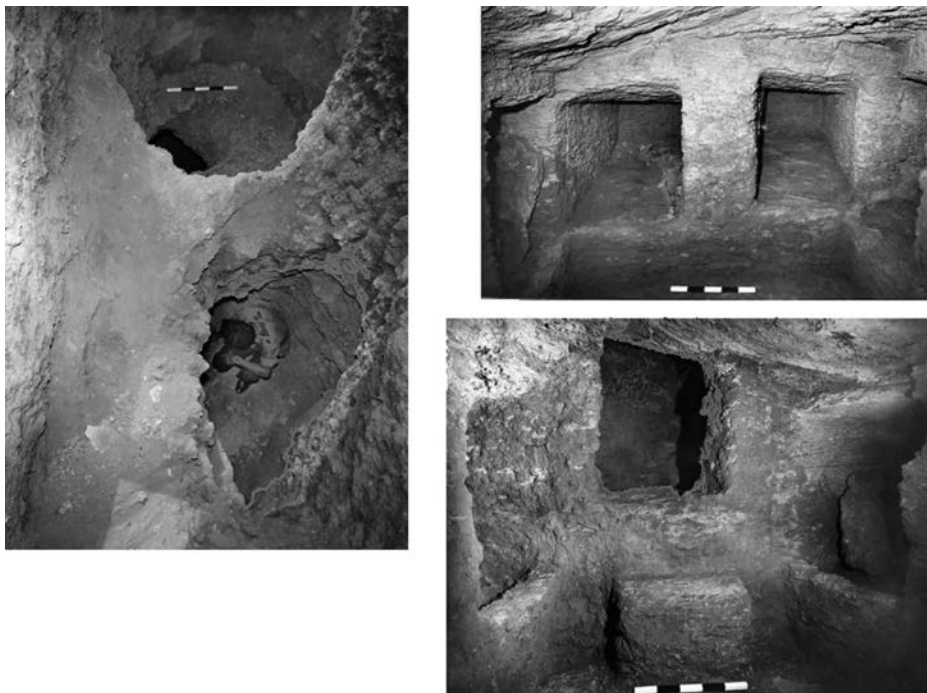


Figure 16.33. Unrecognized cave, shaft(?) leading into tomb (left) and photos of the interior of the chamber (right). Kaplan Archive.

The Byzantine pottery

Storage Jars

Though there were numerous body sherds of ribbed bag-shaped storage jars found in and around the tombs (mainly in the vestibule), only three rims were found. It seems, as No. 4 shows, that halved storage jars were used within the cemetery.

1 Bag-shaped storage jar

Reg. No. 1976/501/009; Cave 1976/11, Locus 11, Bucket 2

Type 1B (Riley 1975); folded rim over medium neck. Clay and surface are orange and gritty and contain some gold-colored sparkling inclusions. In the section there are black and white inclusions.

Parallels: De Vincenz 2008:fig. 38.5.9 (Tiberias, Byzantine to Ummayyad); Johnson 2008:no. 1031 (Caesarea, 5th–7th cents. CE).

Date: 5th–7th cents. CE

2014, pp. 65–146 (Hebrew); E. J. Stern, “The Crusader, Mamluk and Early Ottoman–Period Pottery from Khirbat Din’ila: Typology, Chronology, Production and Consumption Trends,” *Atiqot* 78, 2014, pp. 71–104.

2 Bag-shaped storage jar

Reg. No. 1976/501/010; Cave 1976/E, Bucket 37

Type 1B (Riley 1975); straight medium height neck leading up to a very slightly rounded and thickened rim; clay and surface are pink and gritty; white and sparkling inclusions; in the section black and white inclusions and minute voids.

Parallels: Johnson 2008:no. 1024 (5th–7th cents. CE).

Date: 5th–7th cents. CE

3 Bag-shaped storage jar

Reg. No. 1976/501/011; Cave 1976/C, Locus 27, Bucket 48

Type 1B (Riley 1975); squat upright neck bulging between rim and shoulder ending with a thickened everted rim. Fabric is well fired, surface and clay reddish brown, with many large white inclusions seen both on surface and in section. Surface shows gold-colored mica inclusions.

Parallels: Wiemken and Holum 1981:fig. 14 nos. 13, 17 (Caesarea, 6th–early 7th cents. CE).

Date: 6th–early 7th cents. CE

Amphorae

4 Amphora

Reg. No. 501/76/007; Cave 1976/11, Bucket 2

Type 52 B (Peacock and Williams 1986). Complete amphora; erect rim, from which two loop handles go down to a smoothly curved shoulder, ribbing along the body ending, with a thick spike tow. The surface is dull brown and the material is sandy. This type of amphora is said to have been produced in the Nile region of Egypt. It was found in the vestibule of tomb near the blocking stones of the entrance.

Parallels: Johnson 2008:no. 1280, 1281 (Caesarea, 4th–7th cents. CE)

Date: 4th–7th cents. CE

5 Amphora

Reg. No. 1972/501/001; Cave 1972/2

Unclassified type. Cupped neck with a slightly everted knob rim, handle attached below rim; surface is light brown/pink with white and sparkling inclusions, possible traces of white slip, clay is light brown with white inclusions and voids, core of handle is black. Found by the entrance to tomb.

Parallels: Aviam and Stern 1997:91, fig. 1 (H. Sugar, early 4th cent. CE).

Date: 4th–7th cents. CE

6 Amphora

Reg. No. 1976/501/012; Cave 1976/E, Bucket 39

Base of Type Mid-Roman 3 (Bengahzi) amphora; a ribbed, hollowed tow with a recessed underside, pink surface with gold-colored mica and minute black inclusions, some voids. The clay is darker than the surface, with large white and small black inclusions. Found near the floor of the tomb chamber.

Parallels: Johnson 2008:no. 1210 (Caesarea, late 1st–early 4th cents. CE).

Date: late 1st–early 4th cents. CE

Jugs

7 Jug

Reg. No. 1972/340/004; Cave 1972 (Tnuva Building), Locus 1 (vestibule), Bucket 2

Folded perturbing rim with shallow ridge, light brown/pink surface and clay, gray stone and white inclusions both on surface and in clay.

Parallels: Johnson 2008:no. 439 (Caesarea, later than 2nd half of 4th cent. CE).

Date: 2nd half of 4th cent. CE on

Oil Lamp¹²⁷

8 Candle Stick/Slipper lamp

Reg. No. 1976/501/013; Cave 1976/C, Locus 27, Bucket 49

Type L16 (Loffreda 1989). Uniquely inscribed, large oval lamp with low circular ring base and medium-sized filling hole encircled by two concentric rings. The outer ring opens up and extends into a channel leading toward the nozzle. Two raised lines in relief radiate out on either side of the channel. There is a Greek inscription in relief around the filling hole, written clockwise with letters facing outward:

ΦΩC ἸΛΑΡΩΝ

φῶς ἰλαρ<ό>ν

Joyous light

The *rho* is schematic (Loffreda 1989:figs. 22.16.171, 22.16.79); replacement of omicron with omega is fairly common on oil lamp inscriptions (Loffreda 1989:123, tipo C 2.1; 137, tipo C 7.2).

This type of inscription has not been previously attested on inscribed Byzantine oil lamps, thus this lamp is a *unicum*.

The inscription is a quote from an ancient Christian hymn “Hail Gladdening Light,” which starts with these exact words and praises Christ as the true light. The hymn was sung at sunset during ceremonial and ordinary private and public lighting of lamps (Taft 1986:36–39). Today it is sung in the Eastern Orthodox Vespers (Tripolitis 1970:190). *Phos hilaron* is alluded to in the Ethiopian version of the *Apostolic Traditions* of Hippolytus, a composition originally written in Rome in 215 CE (Tripolitis 1970:193–194). It is clearly mentioned in the 4th century by St. Basil (*De Spiritu Sancto* 29, 73 = PG 32, cols. 205–206) who claims it to be a very ancient hymn written by an unknown author. St. Sophronius of Jerusalem is said to have revised it in the early 7th century (Tripolitis 1970:191–192). The hymn itself has been found on a Coptic papyrus (P. Lond. 2037B) from the 6th or 7th century (Tripolitis 1970). Item location unknown; found in the cist in spot C.

Date: Lamps of this form but with different inscriptions were found in several sepulchral contexts during the Byzantine period (Loffreda 1989:192–201), and are dated between the 2nd half of the 6th century up to the mid-7th century CE (Loffreda 1989:207:no.10; Magness 1993:251, Form 3C).

Ottoman Pottery

Probably all Ottoman pottery from the site belongs to the neighborhood of Abu Kabir, which existed between 1831 and 1948.

Bowls

Plain Bowls

9 Black Gaza Ware bowl

Reg. No. 1976/501/014

Zebdyie. A shelf rim and curved walls, surface and section black with several white inclusions. Material is hard fired and metallic.

Parallels: Israel 2006:208, sub-type 5 (similar, 1700–1950).

10 Black Gaza Ware bowl

Reg. No. 1976/501/015; Locus 6, Bucket 12

Straight rim with a ridge below it; surface and section black; material hard fired, metallic.

11 Black Gaza Ware bowl

Reg. No. 1976/501/016; Locus 15, Bucket 21

¹²⁷ I would like to thank Stanislaw Loffreda for his help in reading and interpreting the inscription, identifying the lamp, and providing me with a new drawing.

Zebdyie. Triangular rim over a V-shaped, ribbed body. Surface is pinkish brown. The interior is darker than the exterior, section is black with voids, white inclusions and small stones are seen on surface. The material is hard fired and metallic.

Parallels: Israel 2006:208, sub-type 5 (1700–1950).

12 Bowl

Reg. No. 25/70/001

Everted, shelf rim over a ribbed curved wall, flat base. The mouth of the bowl is thwarted; surface is light brown pink, exterior may be slipped white, some white inclusions and small stone inclusions. The material is porous but fired hard and metallic. On the rim and on the base there are traces of corroded iron stuck to the bowl. Perhaps it served as a lid to a metal container.

No exact parallels; it is reminiscent of Israel 2006:208, sub-type 5 (1700–1950).

13 Bowl

Reg. No. 1976/501/017; Cave 1976/D, Locus 6, Bucket 26

Flaring rim over a gently curving and ribbed body, flat, thickened base. The surface is light orange brown and the section is black; white inclusions seen in both section and surface. The material is hard fired and metallic. Found on floor of the tomb chamber.

14 Kashkol

Reg. No. 1976/501/018; Locus 15, Bucket 21

Medium-sized serving bowl; bulging incurved rim over a straight walled, ribbed body. The surface is light pinkish brown, perhaps slipped white. The section is black with an orange shell around it; white inclusions and stones seen on both surface and section; voids in section. The material is hard fired and metallic.

Parallels: Israel 2006:213–214, sub-type 6 (1700–1950).

15 Bowl

Reg. No. 1976/501/019; Locus 21, Bucket 31

Bulging rim over curved walls; surface is light pinkish brown while the section is dark pink with voids; many large white inclusions visible on both surface and section. The material is hard fired and metallic.

Parallels: Avissar 2005:75, fig. 2.25, no. 15 (Ottoman, no later than the 19th cent.).

Date: 19th cent.

16 Bowl

Reg. No. 1976/501/020; Locus 30, Bucket 40

Incurved rim over a round body of a shallow bowl; many clay accretions and indents; surface and section are brick red. Some small black and white inclusions in the section. The material is hard fired and metallic.

Glazed Bowls

The following bowls generally correspond to Hayes Ware P, which dates from the late 17th century up until the late 19th century (Hayes 1992:272, 276–277). It is worth mentioning that this same ware is common in the Ottoman pottery assemblage from Yoqne‘am (Avissar 2005:75).

17 Glazed bowl

Reg. No. 1972/340/005

Pointed rim, curved wall, ring base; the mouth of the bowl is thwarted. The exterior is slipped white and the rim is painted with a thick coat of red paint with drippings. There are traces of yellow glaze in spots on exterior. The section is black with an orange shell, and the material is hard fired and metallic.

Parallels: Avissar 2005:75, fig 2.25 no. 10 (19th cent.).

Date: 19th cent.

18 Glazed bowl

Reg. No. 1976/501/021; Locus 26, Bucket 35

Low ring base with curved wall, interior is green glazed. The surface and section are brown/pink with sparkling inclusions. The material is hard fired and metallic. The base is perforated for secondary use.

19 Glazed bowl

Reg. No. 1976/501/022; Locus 11 (vestibule), Bucket 6

Low ring base with curving wall, interior is cream glazed with brown floral motifs. The surface and section are brown/pink with few sparkling inclusions; hard fired and metallic. Base is perforated for secondary use.

20 Glazed bowl

Reg. No. 1976/501/023; Locus 21, Bucket 31

Flaring rim with slightly upturned lip. The interior is cream glazed with two parallel brown stripes on the rim, between which there are crossing lines. The exterior of the rim is also cream glazed. This bowl is the same type as no. 19 (above), having floral motifs in the center and two brown stripes on the rim.

21 Glazed bowl

Reg. No. 1976/501/024; Locus 26, Bucket 35

Low, bow-shaped ring base. The interior is brown glazed with yellow stripes. The surface and section are brown/pink with white inclusions and some sparkling inclusions. The material is hard fired and metallic. The base is perforated for secondary use.

22 Glazed bowl

Reg. No. 1976/501/025; Locus 15, Bucket 21

Folded rim over a straight walled body; interior and rim have a well-adhered olive green glaze with decorative stripes of lighter green. The outer surface is pink and so is the section. The material is well levigated, thin, hard fired, and metallic.

Parallels: Avissar 2005:75, fig 2.25, no. 6 (similar, Ottoman until the 19th century).

Date: 19th cent.

23 Glazed bowl

Reg. No. 1976/501/026; Locus 15, Bucket 26

Similar in form and material to no. 22, but interior is glazed brown with yellow stains, white slip stains on exterior.

24 Glazed bowl

Reg. No. 1976/501/027, Bucket 32

Out-turned rim over sloping wall, two mid-body ridges, ring base. Interior is glazed bright yellow over white slip. Exterior rim glazed and slipped the same way, body stained with white smears of paint. The surface is pink and so is the section. Various dark inclusions seen in both. The material is hard fired and metallic.

Parallels: Hayes 1992:fig. 144, 13 (late 17th – late 19th cent.).

25 Glazed bowl

Reg. No. 1976/501/028; Cave 1976/F, Bucket 41

Flat flaring rim with slightly upturned lip over a straight wall. The interior has light brown and yellow stripes glazed over a foundation of white slip; Found 1.8 m above the floor of the cave.

Parallels: Hayes 1992:fig. 108, a11.1 (similar in form only).

26 Glazed bowl

Reg. No. 1976/501/029; Locus 15, Bucket 21

Grooved shelf rim with a scalloped, slightly upturned lip. Interior glazed green over white slip; exterior of lip also glazed.

Parallels: Hayes 1992:280–281, Type a–12, fig. 107 no. 12.1 (from 17th cent.).

Fine Table Ware

The Çannakale bowls are sharing the same smooth red clay, lighter on surface than in section. Their interior is glazed brown with garish yellow motifs; their exterior is white slipped with some stain glazing in sparkling yellow. The rims are of the typical ottoman sloping or shelf rim with an upturned lip. This combination of form and decoration is typical of the wares produced in Turkey at Çannakale (also known as Gallipoli), where the pottery industry was active since the seventeenth century up until World War I. All the vessels represented here are variants of the same type of glazed bowl common in the 19th and early 20th century (Hayes 1992:268–270; Avissar 2005:75–78).

- 27 Çannakale bowl
Reg. No. 1976/501/030, Bucket 32
Sloping rim leading up to an upturned lip over V-shaped, slightly ribbed walls, standing on a flat base. The interior and the lip are glazed brown with a yellow stripe over rim and a yellow blot on the bottom. Exterior is neither slipped nor glazed.
- 28 Çannakale bowl
Reg. No. 1976/501/031; Locus 26, Bucket 35
Shelf rim with upturned lip over sloping walls. Interior is glazed brown with yellow stripes. Exterior is white slipped with sparkling yellow stain glazing.
- 29 Çannakale bowl
Reg. No. 1976/501/032; Locus 26, Bucket 35
This bowl is a shallower, thinner and more softly curved version of no. 28. Decoration is similar.
- 30 Çannakale bowl
Reg. No. 1976/501/033; Locus 15, Bucket 26
Flat base and curved wall. Interior glazed brown with yellow stripes. Exterior is white slipped with yellowish glazed stripes.
- 31 Çannakale bowl
Reg. No. 1976/501/034; Locus 15, Bucket 21
Sloping rim with upturned lip over curved wall. Interior glazed brown sprayed with yellow glaze. Exterior is white slipped with yellowish, glazed stripes.
- 32 Çannakale bowl
Reg. No. 1976/501/035; Locus 21., Bucket 31
Shelf rim with groove climbing to an upturned lip over what is probably a V-shaped body. Interior is glazed brown with yellow stripes. Exterior lip is painted red with excess color, and body is slipped white, probably with some brown stains.
- 33 Çannakale bowl
Reg. No. 1976/501/036; Locus 21, Bucket 31
Shelf rim with upturned lip over curved wall. Interior is glazed brown. Exterior lip is glazed brown, while body is probably slipped white with sparkling yellow stain glazing.

White Wares

Items 34 to 37 are all soft paste wares. Only the manufacturer of item 34 is from a recognizable factory. All items date from the late 19th or 1st half of the 20th century.

- 34 Porcelain fragment
Reg. No. 1976/501/037; Locus 4, Bucket 10
A stepped ring base of a dish, made of what is probably soft paste porcelain, glazed white, with delicate moldings at the base. A maker's mark is stamped in brown on the bottom: the three interlocked crescents of Bordeaux, around which the inscription: [J. Vi]eillard & CIE | Bordeaux.
Date: Jules Vieillard had bought this ceramics company in 1845 off the hands of its founder David Johnston who then went on to become the Mayor of Bordeaux. The company produced soft paste porcelain up until 1895, when it closed down. The mark used here is probably post 1845, when the company was owned by Vieillard himself – thus dating the piece from 1845 up to 1895.
(<http://ogabathuler.free.fr/Francais/Histoire/faiencesfines.html>)
- 35 Glazed dish
Reg. No. 1976/501/038; Locus 17, Bucket 23
Dish with flaring rim and slightly upturned lip. Shallow ring base; white section and white glaze, gray spots on glaze.
- 36 Glazed dish
Reg. No. 1976/501/039; Locus 26, Bucket 35
Base of a polychrome glazed dish, made of white clay with some gray inclusions. The white background glaze with the blue, green and purple floral motifs is grazed and flaking.

37 Coffee cup

Reg. No. 1976/501/040; Locus 30, Bucket 47

Straight rim and wall of coffee cup (*finjan*), white section and surface (soft paste?). Floral design is printed on the surface thus indicating a rather advanced date in the 20th century.

Kütahya Imitation Coffee Cup

38 Kütahya imitation coffee cup

Reg. No. 1976/501/041; Locus 30, Bucket 40

Ring base of a coffee cup (*finjan*), covered with a cream-colored glaze with purple radiating lines on exterior, between which is an ornament in blue. On the bottom of the interior there is a purple spot, and on the exterior a mark, two small lines, perhaps an imitation of the two crossed swords of Meissen. The material is creamy in section, and very well levigated, but it is a soft paste. This vessel is probably an imitation, perhaps even a local one, of the famous Kütahya Ware.

Parallels: Hayes 1992:266–268, fig. 100 nos. 6, 7 (Kütahya ware, mid-18th to early 20th cent.).

Jars

39 *Zir*

Reg. No. 1976/501/042; Locus 15, Bucket 21

Water storage jar. A slightly thickened flat topped flaring rim, several thin decorative incisions on bottom of neck. The surface is light brown, the section is black with voids, dark inclusions on surface. The vessel is wheel made, hard fired and metallic.

Parallels: Israel 2006:118–123, fig. 87e (general type).

40 Water Wheel Pot

Reg. No. 1976/501/043; Locus 6, Bucket 12

Kados Kabir, also used in construction. A wide almost straight neck ending with a round and thickened rim. The surface is light yellowish brown (interior is darker than exterior). The section is black with many voids and small white inclusions. On the interior there is excess clay. The material is fired hard and metallic.

Parallels: Israel 2006:79–80, sub type 1 (1700–1900).

41 Water carrying jug

Reg. No. 1976/501/044; Locus 16, Bucket 22

Jarra. A bulging neck that narrows below a thickened and everted rim. The surface is light yellowish brown, and in the section the core is black and its shell is orange. Large white inclusions appear in section and surface, some voids in section. The material is hard fired and metallic.

Parallels: Israel 2006:106–107, *Jarra* sub type 17 (1900–1948).

42 Storage jar

Reg. No. 1976/501/045; Locus 28, Bucket 37

Black Gaza Ware *birnije* for dairy products. A grooved wide shelf rim, surface and section black with large white inclusions. The material is hard fired and metallic.

Parallels: Israel 2006:234–235, sub-type 2 (1700–1970).

43 Hole-mouth storage jar

Reg. No. 1976/501/046; Locus 28, Bucket 37

Hedryia or *Zir*. A thickened oval rim with no neck, probably over a globular body. The material is light pink full of white, gray and sparkling inclusions. The surface has burn marks and the section is gray and porous.

Parallels: Israel 2006:fig. 93 (hole-mouth storage jars seen in early 20th cent. photo).

44 Storage jar

Reg. No. 1976/501/047; Locus 26, Bucket 35

Birnije with flaring rim thickened at the edge under which there is a flat and wide handle. The surface is light gray/brown and the interior is pink. The section is black with orange shell, white inclusions visible on both surface and in section, which has some voids. The material is metallic and hard fired.

Jugs

45 *Ibriq*

Reg. No. 1976/501/048; Locus 17, Bucket 23

Drinking water jug. A pear-shaped body leading up to a narrow high neck with a folded rim. The upper half of the body is decorated with waves and lines incised before firing. Two handles jut out from the base of the neck down to the upper third of the body. The surface is light brown and the incisions are dark red, the material is hard fired and metallic.

Parallel: Israel 2006:155, sub type 6 (in form, with no decorations, 1700–1900).

46 *Ibriq*

Reg. No. 1976/501/049; Locus 31, Bucket 46

Black Gaza Ware. Tall neck, gently ribbed leading to a triangular rim. Two flat handles lead up from the base of the neck and go down toward the body. The surface is black, and the material is hard fired, metallic.

Parallels: Israel 2006:152, sub-type 2 (found in Jaffa, 1700–1900).

47 *Ibriq*

Reg. No. 1976/501/050; Locus 17, Bucket 23

Black Gaza Ware. Tall straight and ribbed neck ending with a triangular rim. The material is black and metallic with white inclusions.

Parallels: Israel 2006:155–156, sub type 6 (1700–1948).

48 *Kuz*

Reg. No. 1976/501/051; Locus 22, Bucket 16

Water pouring jug. Cone-shaped neck leading up to an erect and thickened rim. The surface is light brown, core is black with an orange shell. Large white inclusions in section and on surface, large voids in section. The vessel bears burn marks on the interior.

Parallels: Israel 2006:134–135, sub-type 2 (1700–1948)

49 *Kuz*

Reg. No. 1976/501/052, Bucket 3

Black Gaza Ware water pouring jug. Tall slightly cone-shaped neck leading up to a gently out-curving rim. One handle is attached from the base of the neck to the shoulder. The handle is opposite to the spout. At the base of the neck there is a filter. The surface is black and chevrons in a synthetic bright orange color cover the neck, handle and upper third of the body (the color washes off in contact with water). The material is thin, hard fired and metallic.

Parallels: Israel 2006:134–135, *Kuz* sub-type 2 (similar).

Date: 20th cent.

Tobacco Pipes

50 Tobacco pipe

Reg. No. 1976/501/053; Locus 1, Bucket 23

The shank and stem of a gray clay pipe with bulbous wreath, culminating in a stepped ring. The wreath is stamped in a floral decoration and above and below it the flange and stem are incised with lines. Some of the base of the bowl remains; it seems the sides were stamped with a floral motif, while the curved bottom was accentuated with curving incised lines.

Parallels: Avissar 2005:83–84, fig. 4.1, no. 1 (Pipes of this type of clay were in use in the 17th and 18th cents.).

51 Tobacco pipe

Reg. No. 1976/501/054; Locus 1, Bucket 23

The base of the shank of a red clay burnished pipe; one edge of the shard is rouletted.

Parallels: Hayes 1992:393–394, red-burnished type (common in the 19th and early 20th cent.).

Miscellaneous Pottery

52 Kerosene Lamp(?)

Reg. No. 501/76/006; Cave 1976/A, Vestibule, Bucket 6

A bulb-shaped vessel with a disc on top opening into what may have been a conical nozzle. The surface is creamy and the section pink. Many black inclusions seen on surface and in section. The material is hard fired. This object may have been the receptacle of a clay-made kerosene lamp. Clay kerosene lamps came into use at the end of the 19th century (Israel 2006:251–252). This type may be a transitional phase between the clay kerosene lamps with a receptacle set over a tall stand and the tin lamps made only of free standing receptacle and wick. The elongated conical nozzle was probably intended for the wick, over which a glass casing may have been set.

53 Juglet

Reg. No. 501/76/004; Bucket 6

Pear shaped body, upper half is closely ribbed; omphalos base; surface is cream and ware is buff. No parallels were found, but it bears a certain resemblance to the Early Islamic buff ware.

54 Juglet

Reg. No. 501/76/005; Bucket 6

The lower half of a juglet, ribbed over a conical base. Surface and section light brown with white inclusions; voids in the section.

No parallels found but the ware seems to indicate a late Roman/Byzantine date.

55 Juglet

Reg. No. 1976/501/055; Cave 1976/2

Straight neck, fluted and decorated with a punctured floral motif (before firing). From the mid-section of the neck a slender handle juts out and down toward the body. There are remains of a strainer in the interior. The surface of the interior is pink/gray, the section is gray, and the exterior surface is orange with a cream slip over it. The material is hard fired and metallic. The item was uncovered in the shaft in the vestibule of the cave. No parallels found.

56 Amphora

Reg. No. 1976/501/058

Small amphora with a pear-shaped ribbed body and a square shelf rim, having at least one handle leading from the rim down toward the body. The findspot is unknown as is the current location of the artifact. Its photo appears in the IAA archive (Folder A 501 1975, Neg. no. 7974).

No exact parallels for this amphora were found, but the shape of the body may suggest a date between the 11th and 13th centuries (e.g., Bagatti 2002:fig 58.3).

57 Stopper

Reg. No. 1976/501/056; Locus 18, Bucket 24

Rounded piece of white ware with polychrome glazed stripes: blue, black, white, and red.

58 Reworked sherd

Reg. No. 1976/501/057; Locus 17, Bucket 23

Trapezoid worked sherd, the surface is pink and very smooth. A section of the same color in both white and sparkling inclusions can be seen. This tool was probably used to burnish pottery or plaster as it was in a leather hard stage.

59 Roof Tile

Reg. No. 1976/501/057; Locus 21, Bucket 31

Fragment of a Marseille roof tile.

Such tiles were imported in the 19th and early 20th centuries.

The Glass

By Ruth E. Jackson-Tal

Bowls

60 Glass fragment

Reg. No. 1976/501/059; Locus 10, Bucket 19

High tubular base-ring. Yellowish-green, silver weathering, iridescence.

Parallels: Weinberg and Goldstein 1988:41, 43–44, fig. 4–4:44.

Date: 3rd–4th cents. CE

61 Glass fragment

Reg. No. 1976/501/060, Bucket 45

Trailed base. Light blue, silver weathering, iridescence.

Parallels: Weinberg and Goldstein 1988:58–59, fig. 4–21: 152–155.

Date: 3rd–4th cents CE

62 Bracelet

Reg. No. 1976/501/061; Locus 6, Bucket 12

Flattened bracelet with semicircular section. Opaque light blue with vertical patches in red and yellow(?), silver weathering, iridescence.

Parallels: Spaer 2001:203:474.

Date: Ottoman period

Bottles

63 Bottle

Reg. No. 1976/501/062; Bucket 20

Small trailed wall fragment, probably bottle. Colorless, black, silver weathering, iridescence.

Parallels: Weinberg and Goldstein 1988:70–71, fig. 4–32:272.

Date: 4th–5th cents. CE

64 Bottle

Reg. No. 1976/501/063; Locus 7, Bucket 13

Neck fragment. Light blue, silver weathering, iridescence.

Date: 3rd–5th cents. CE

65 Bottle

Reg. No. 1972/340/006

Neck fragment. Light blue, silver weathering, iridescence.

Date: 3rd–5th cents. CE

66 Glass fragment

Reg. No. 1972/340/007; Cave 1972/3, Bucket 18

Upright rounded rim and neck fragment. Colorless, black and silver weathering, iridescence.

Parallels: Weinberg and Goldstein 1988:70–71, fig. 4–32:272, 274.

Date: 4th–5th cents. CE

Coins

67 Coin

Reg. No. N/25/68/001; Chance find near the Russian Church in 1968

Ptolemy III (?), 246–221 BCE, Alexandria.

Obv.: Laureate Head of Zeus Ammon r., dotted fringes.*Rev.*: ΠΤΟΛΕΜΑΙΟΥ [ΒΑΣΙΛΕΩΣ]. Eagle standing on thunderbolt, its wings gathered; behind its head a cornucopia, possibly an undecipherable monogram between its legs.

Æ, ↑, 6.04 gr., 19–20 mm.

SNG – Copenhagen, Ptolemies, pl. VII:191.

68 Coin

Reg. No. N/340/72/001; Cave 1972/4,¹²⁸ Chamber B, Floor, Bucket 19

Agrippa I, 41/42 CE

Obv.: [BACIAEWC AΓPIΠA]. Royal canopy.

Rev.: [L ϸ] = year 6, Three ears of barley.

Æ, ↑, 1.51 gr., 15 mm.

TJC 131, no. 120.

69 Coin

Reg. No. 1976/501/006; Cave 1976/2a, Loculus 4 (below the breach in the ceiling, probably the *loculus* closest to the door), Bucket 5

Possibly 3rd cent. CE according to dimensions of flan.¹²⁹

70 Coin

Reg. No. N/340/72/002; Cave 1972/3, Chamber B, Floor, Bucket 3

Constantine I, 306–337 CE, Constantinople.

Obv.: CONSTANTINVS MAX AVG. Laureate and crowned head of Emperor r. clad in armor.

Rev.: GLORIA [EXERCI]TVS. Two armed legionaries guarding the legion's standard positioned in the center.

Æ, ↓, 1.80 gr., 18–19 mm.

LRBC 1:24, no. 1024; Published by Kaplan (1974a; 1974d) as a coin of Constantius II (337–361 CE).

Revised reading by Donald Ariel.

71 Coin

Reg. No. 25/66/001; Cave 1966, Burial chamber (45 cm. below threshold), Bucket 3¹³⁰

4th–5th cents. CE,¹³¹ possibly Arcadius, 383–408 CE

Obv.: Pearl-diademed bust to the right(?).

Rev.: Victoria holding a trophy(?).

Æ, ↓, 15 mm – unknown weight.

72 Coin

Reg. No. 1972/340/001; Cave 1972 (Tnuva Building), Locus 1 (vestibule), Bucket 3¹³²

Illegible coin of the *minimi* type.

Æ, 0.25 gr., 8–9 mm.

Date: 5th cent. CE according to the dimensions of the flan (Bijovsky 2002).

73 Coin

Reg. No. N/501/76/002; Locus 31 (from probe along Kibbutz Galuyot St., 1976)

Latin Kingdom of Jerusalem, Amalric I, 1163–1174, Jerusalem.

Obv.: AMALRICVS REX. A cross flanked by two dots enclosed within a circle.

Rev.: + DE IERVSALEM. The Holy Sepulcher.

AR, ↑, Denier, 0.7 gr., 17.5–16.8 mm.

Metcalf 1995:pl. 11, no. 186.

74 Coin

Reg. No. N/501/76/004

Ottoman Empire, Mustafa III, AH 1171–1757 CE, Egypt.

Obv.: Tughra of Mustafa within a dotted circle.

Rev.: Arabic inscription within a dotted circle, below the date: AH 1171

¹²⁸ Only one of the two coins found in this tomb remains.

¹²⁹ I would like to thank Yoav Farhi for this observation.

¹³⁰ Since the photo is unclear the data presented here is taken directly from the Jaffa Museum of Antiquities artifact catalog. The coin has no IAA no. because its location was unknown also when D. Ariel read the Jaffa coins on behalf of the IAA.

¹³¹ According to D. Ariel the diameter of the flan may indicate a date in the 2nd half of the 4th century CE.

¹³² I would like to thank Yoav Farhi for identifying this coin.

AR, ♁, 0.23 gr., 14–15 mm, perforated

Pere 1968:217, no. 64.

75 Coin

Reg. No. N/501/76/001

Ottoman Empire, Sultan Abdul Majid, AH 1255/5 = 1839 CE, Egypt.

Obv.: Tughra of the sultan.

Rev.: Illegible inscription with date and mint.

Æ, ↑, 3.77 gr., 19.5–20.0 mm.

Bruce 1977:390, C#194.

76 Coin

Reg. No. N/25/64/001; Found near one of the caves, 1964

Ottoman Empire, Abd el-Aziz, AH 1277–1293 = 1860–1876 CE, Istanbul.

Obv.: Tughra of the sultan.

Rev.: The denomination: 10 (Para) and around the inscription: “to the might of his reign.”

Cupro-nickel, ↑, 31 mm.

Bruce 1977:1431, Y#2.

77 Coin

Reg. No. N/501/76/003

German Colonists, Jaffa, 1880–1888 CE

Obv.: B & C (Breisch & co.).

Note: this is a private token minted on behalf of the German Templar Breisch & Co. department store that operated in Jaffa during the eighties of the 19th century (Kindler 1966).

Metal Artifacts

Constructional Elements

Nails

78 Nail

Reg. No. 501/76/010; Cave: 1951/3

Max.: 0.1; Head dia.: 0.9; Square section: 0.3 x 0.3

Bronze. Round head.

Reference: Rafael 2008:Type C, no. 23.

79 Nail

Reg. No. 1972/340/002; Cave 1972/Tnuva Building (from a chamber)

Max.: 1.31; Square section: 0.3 x 0.3

Bronze. Looped head, the nail may be part of a hinge or (since it is bronze) a decorative revetment.

80 Nail

Reg. No. 1976/501/002; Cave 1976/B, Bucket 2 (Found uncovering contours of Cave B vestibule).

Max.: 1.4; Oval head: 1.5 x 1; Round section: 0.6

Iron.

Parallel: Rafael 2008:Type H.

81 Nail

Reg. No. 1976/501/003; Cave 1976/B, Bucket 2

Max. L.: 7; Round section: 0.5

Iron; bent.

Reference: Such bent nails may have been used in wooden coffins (Mazar 1973:fig. 27; Rafael 2008:Type G).

82 Nail

Reg. No. 1976/501/005; Cave 1976/D, Bucket 19 (from floor of vestibule)

L.: 6.5; Round head: 1.7; Rectangular section: 0.7 x 0.8

Iron.

Reference: Rafael 2008:Type G.

83 Nail

Reg. No. 1976/501/007; Cave 1976/2A, Loculus 3 (NW *loculus*), Bucket 3 (1975 excavation)

L.: 5; Round head: 0.8; Round section: 0.5

Iron; bent.

Reference: see 1976/501/003

84 Nail

Reg. No. 1976/501/008, Cave 1976/2, Bucket 54 (Found in the fill inside the eastern chamber 1.2 m below the ceiling)

1.7 Round head: 0.7 Round section: 0.6

Iron.

Reference: Mazar 1973:fig. 27.

Iron Fitting

85 Iron fitting

Reg. No. 1976/501/004; Cave 1976/B, Locus 1, Bucket 11 (on second step leading down to the vestibule)

Max.: 1.5; Round section: 0.7

Folded tip.

Iron Rings

86 Iron ring

Reg. No. 1972/340/003;Cave 1972 (Tnuva Building) (from chamber)

Diam.: ca. 4; Round section: ca. 0.6

Iron ring; a hooked clasp preserved on one end.

87 Iron ring

Reg. No. 501/76/008; Locus 10, Bucket 16 (Found in a probe trench on the hill next to cave 1976/11)

Outer diam. 5.5; Rectangular section: 0.5 x 0.5

Iron ring with a fitting on one of its sides.

Parallels: This item may have been used as a ring attached to a wooden casket, though those seem to be larger (Kabri, Stern and Gorin-Rosen 1997:5–7), or connected to a door as a knocker or to a pole to tie animals (Caesarea, Rafael 2008:nos. 77–79).

Bells

88 Bell

Reg. No. 25/64/001; Cave 1964/2 (from the floor of the vestibule before cave's entrance)

H. 4.5; Diam.: 2.6

Bronze, cone-shaped bell with ring on top, without clapper.

Parallels: Bells of this type are found in several burial caves and other contexts which may date between the 4th and 6th century CE (Caesarea, Rafael 2008:448, no. 233; Kisra, Stern 1997:124, no. 59, 6th century CE; Kh. el-Shubeika, Thatcher et al 2002:274, no. 39, fig. 11:2, Late Byzantine period). Similar bell was found in Area A in Jaffa and dated to the Roman–Byzantine periods (no 10.69) (see chapter 12.8 p. 493).

89 Bell

Reg. No. 25/64/002; Cave 1964/2 (from the floor of the vestibule before cave's entrance)

H. 1.5; Diam.: 2.8

Bronze, hemispheric bell, the perforation at its top was meant to clasp the now missing ring and clapper.

Parallels: 4th–6th century CE (Caesarea, Rafael 2008:451, no. 276, end of 4th century CE or slightly later; Kh. el-Shubeika, Thatcher et al 2002:274, no. 43, fig. 11:6, 4th to 7th century CE; Beit 'Einun, Magen 1990:283–284, fig. 12, Byzantine; El Jish, Makhoully 1939:45–46, pl. XXXI:6, 4th–5th century CE; Luzit, Avni and Dahari 1990:311, fig. 10, 5th–7th century CE).

Jewelry

Amulet

90 Amulet

Reg. No. 25/64/004; Cave 1964/2, Bucket 6

H. 3.5; W.: 2.2

Iron; leaf-shaped pendant with ring on top. Within the ring traces of the chain (iron also). Probably an amulet, but the depiction and/or inscription on its face cannot be discerned due to erosion. X-ray photo did not add any information.¹³³

Parallels: Amulets upon metal pendants are found in Late Roman and Byzantine period tombs (Kaplan 1966b:239–244, 2nd half of 4th century CE; Bonner 1950:no. 319, 6th–7th century CE; Makhoully 1939, pl. XXXI 5, 7, pl. XXXII:h₁, h₂, 4th–5th century CE).

Bracelets

91 Bracelet

Reg. No. 340/72/001; Cave 1972 (Tnuva Building), Locus 2, Bucket 2 (from vestibule of the cave)

Diam.: ca. 4.5; Ovoid section: 0.2 x 0.3

Bronze wire; flattened and entwined edges that perhaps had a “snake eye” decoration.

Parallels: Similar bracelets are common in burial caves from the 3rd–6th century CE (Stern 1997:123:no. 56, Late Roman/Byzantine; Vitto 2008:109, fig 3:1–2, 3rd to 4th century CE).

92 Bracelet

Reg. No. 501/76/011; Locus 31 (from probe along Kibbutz Galuyot St.).

Diam.: ca. 7.5; Ovoid section: 0.2 x 0.3

Bronze wire.

Varia

Bronze Plate Shaped Item

93 Disc

Reg. No. 501/76/013 (From entrance of cave on northwest slope of mound)

Diam.: 4.4

Bronze. Disc with a raised flat rim. Two slanting incisions on its rim may indicate a broken joint connecting to a hinge or handle. If this was connected then perhaps the object may have been a folding “compact” mirror case, where one half of the case is occupied by a small mirror. The object may have also been used for cosmetics.

Parallels: A “compact” mirror case was found in Corinth, dated to the “Byzantine period or later” (Davidson 1952:no. 1309).

Bronze Sheet

94 Sheet

Reg. No. 1976/501/001; Cave 1976/A, Bucket 46 (from vestibule floor)

L.: 5; W.: 1

A rolled up and now flattened sheet of bronze.

¹³³ I would like to thank Ms. Miriam Lavi, head of the conservation laboratory at the Institute of Archaeology of the Hebrew University in Jerusalem for the X-ray photography.

Miscellaneous

Bone Comb

95 Comb

Reg. No. 501/76/009; Cave 1976/D, Locus 6, Bucket 31 (From western chamber from clearing the debris from breach in the ceiling)

L.: 1.6; W.: 2.7; Th.: 0.4; Teeth 2 and 0.5

An oblong comb with teeth on its short sides, one side with long teeth and the other with short dense teeth; the base of the teeth is decorated with a thin incised line. Two iron rivets are inserted into its side (their function is unknown).

Parallels: Wooden combs with teeth on narrow ends were found in sepulchral contexts from the 2nd century BCE to the 1st century CE tombs of En Gedi (Hadas 1994:5, 51–52, fig. 15.20). A comb similar in form but made of wood was found in the Cave of Horror in the Judean Desert from the 2nd century CE (Aharoni 1962:166–167, pl. 12.4). An ivory comb most similar to our own was found in a Late Roman context in Corinth (Davidson 1952:no. 1300), and a very similar, but a bit more ornamented late Roman bone-made comb was found in Wushym, Egypt (Petrie 1927:25–26, no. 60, pl. XX.19).

Bone Disc

96 Disc

Reg. No. 501/76/012; Locus 31 (from probe along Kibbutz Galuyot St.).

Diam.: 3.2; Perforation: 0.9

A bone disc polished and perforated in its center, one side is flat while the other convex.

Parallel: This item may have been used as a button, a bead on a necklace or perhaps it was an ornamental inlay in a piece of furniture (Caesarea, see Ayalon 2005:nos. 58 and 59).

Pendant (?)

97 Pendant

Reg. No. 25/64/003; Cave 1964/2, Bucket 6

Diam.: 2.6; Th.: 0.8; Max. diam. of perforation: 0.9

Stone; a pebble made into a drop-shaped pendant(?), beige; traces of dark red paint above and around perforation, convex front and flat back.

Parallels: Bead necklaces are commonly found in Byzantine tombs, but mostly beads and pendants are made of glass or precious stones (Beit 'Einun, Magen 1990:283–284, fig. 12, Byzantine; Kh. Kerak, Delougaz and Haines 1960:pl. 46, beads from Byzantine tombs). The remains of paint and flat back suggest this object is a pendant. It may also be a type of weight.

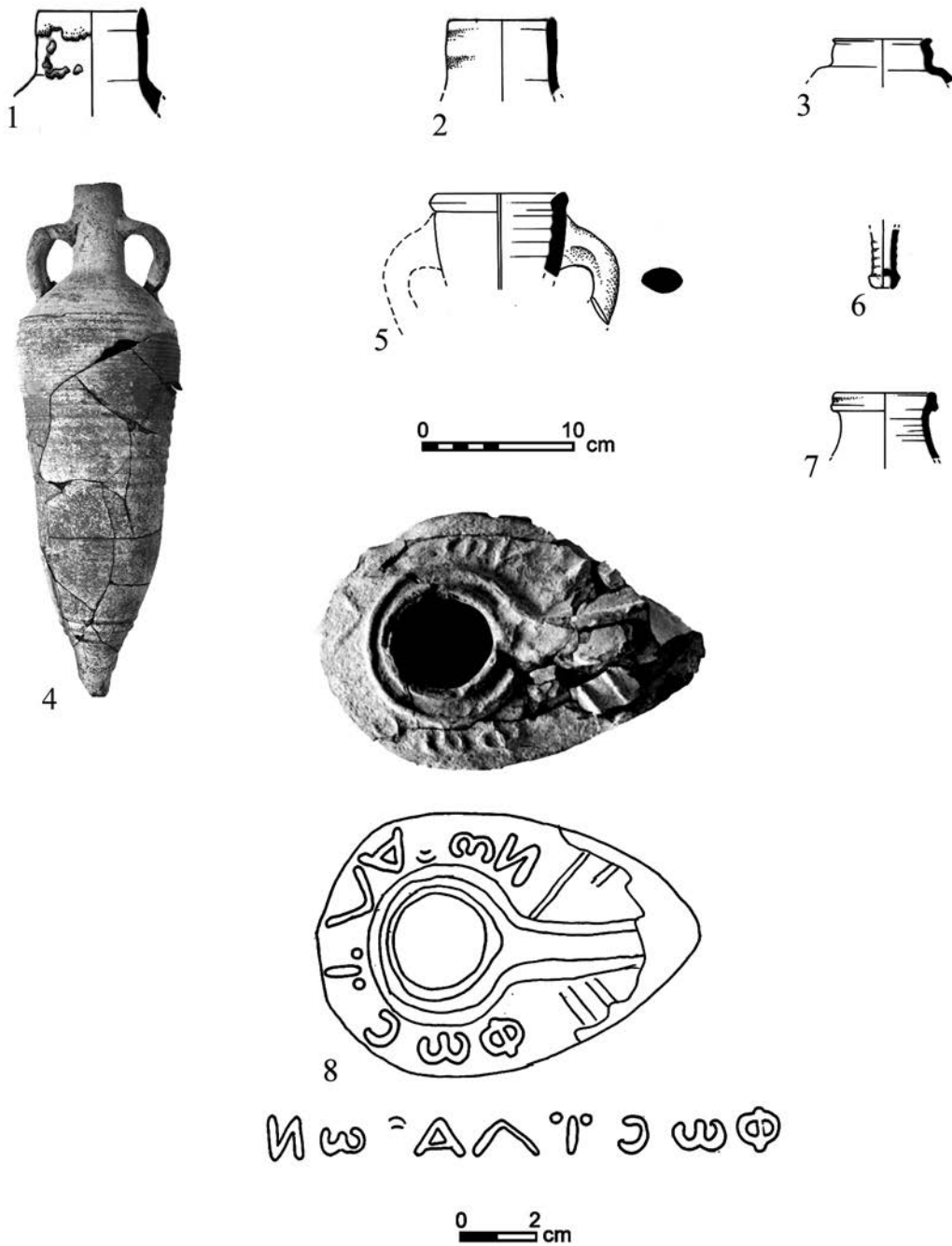


Figure 16.34. Byzantine Pottery.

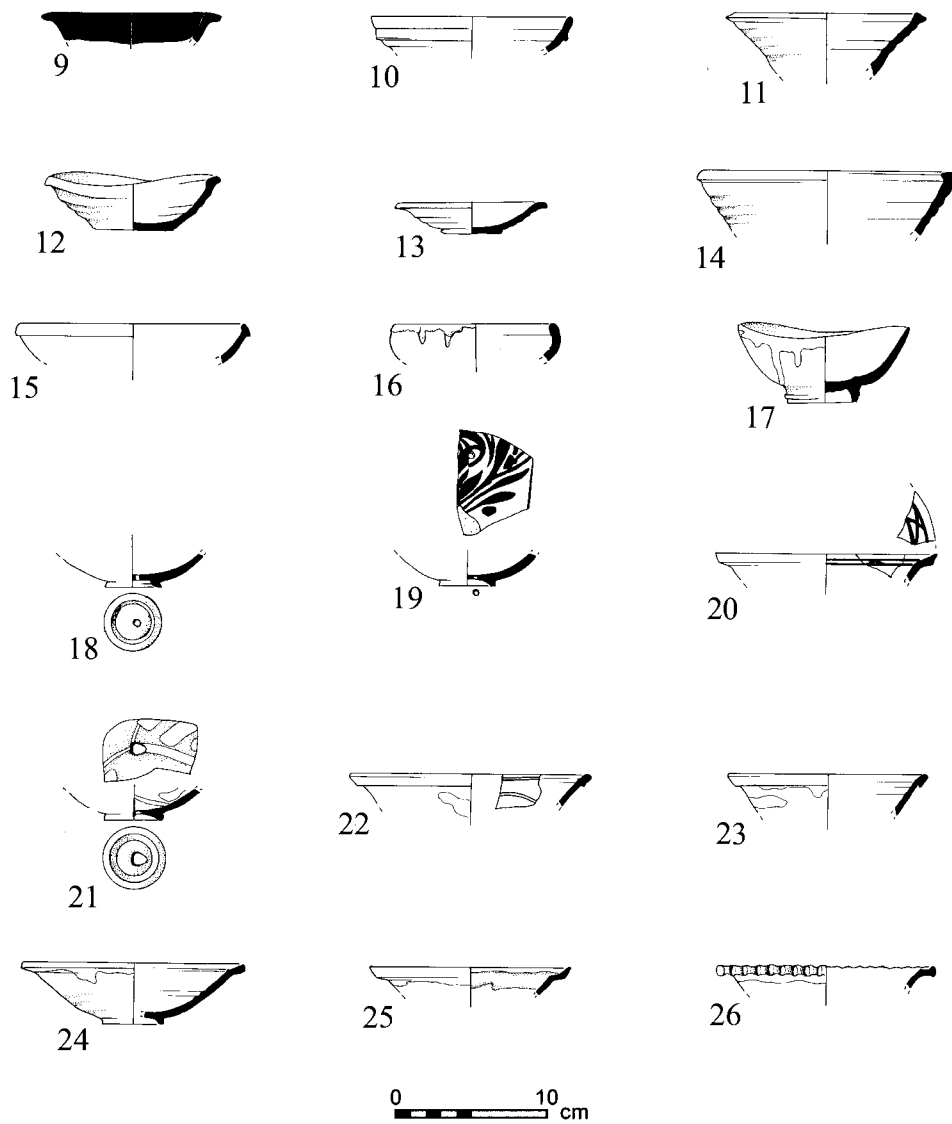


Figure 16.35. Ottoman Pottery: Plain and Glazed Bowls.

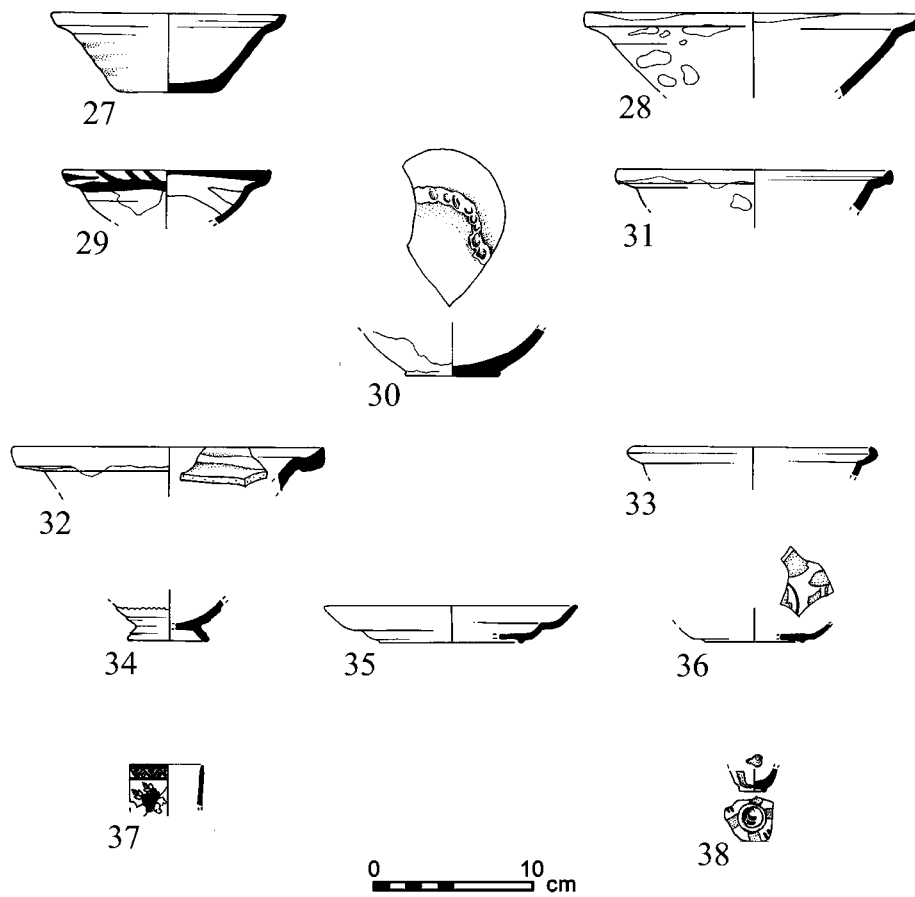


Figure 16.36. Ottoman Pottery: Fine Table Ware.

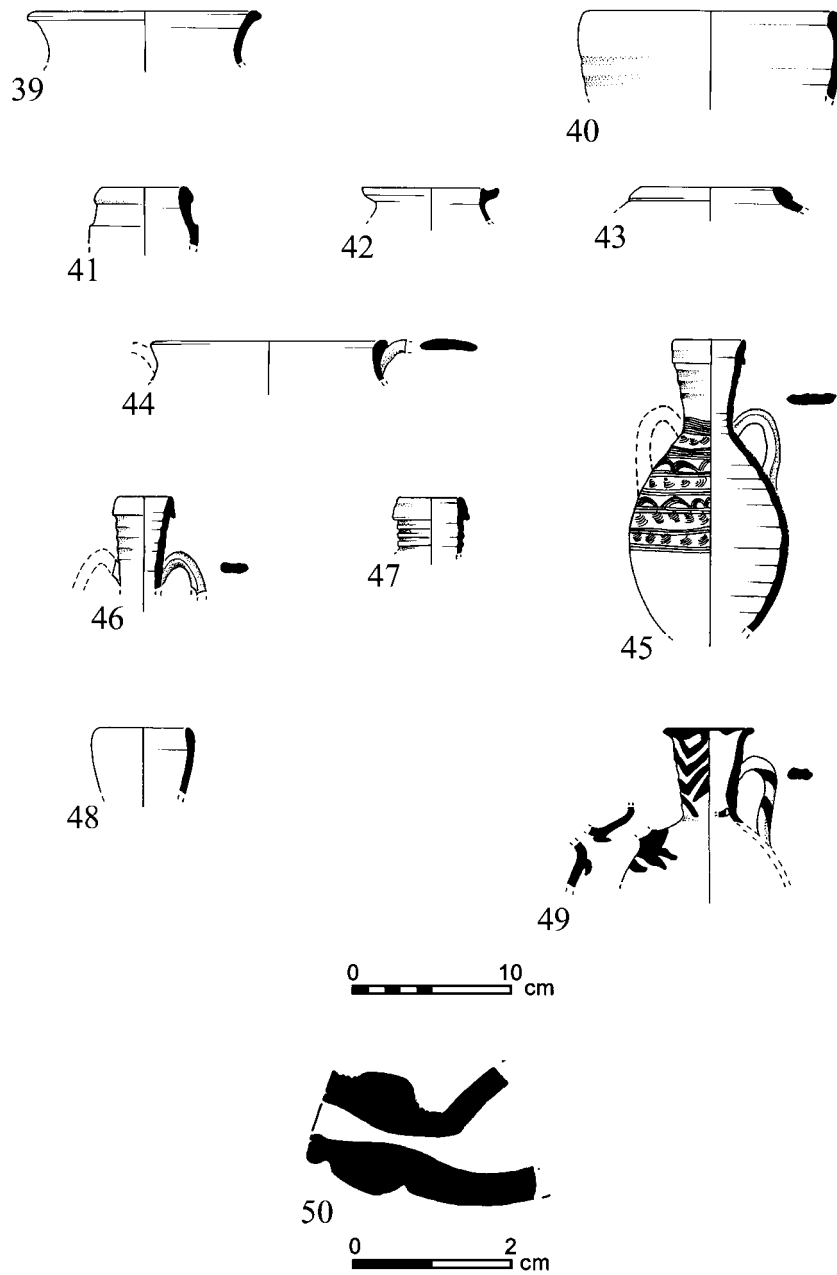


Figure 16.37. Ottoman Pottery: Jars and Jugs.

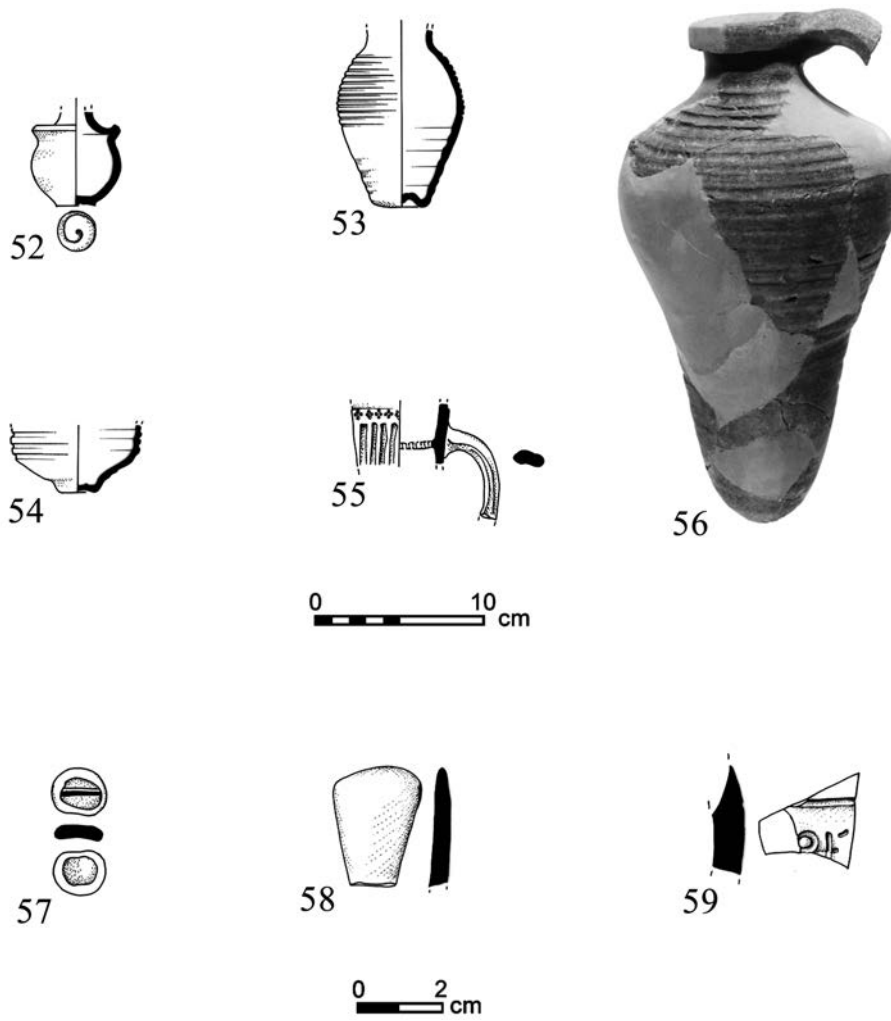


Figure 16.38. Miscellaneous Pottery.

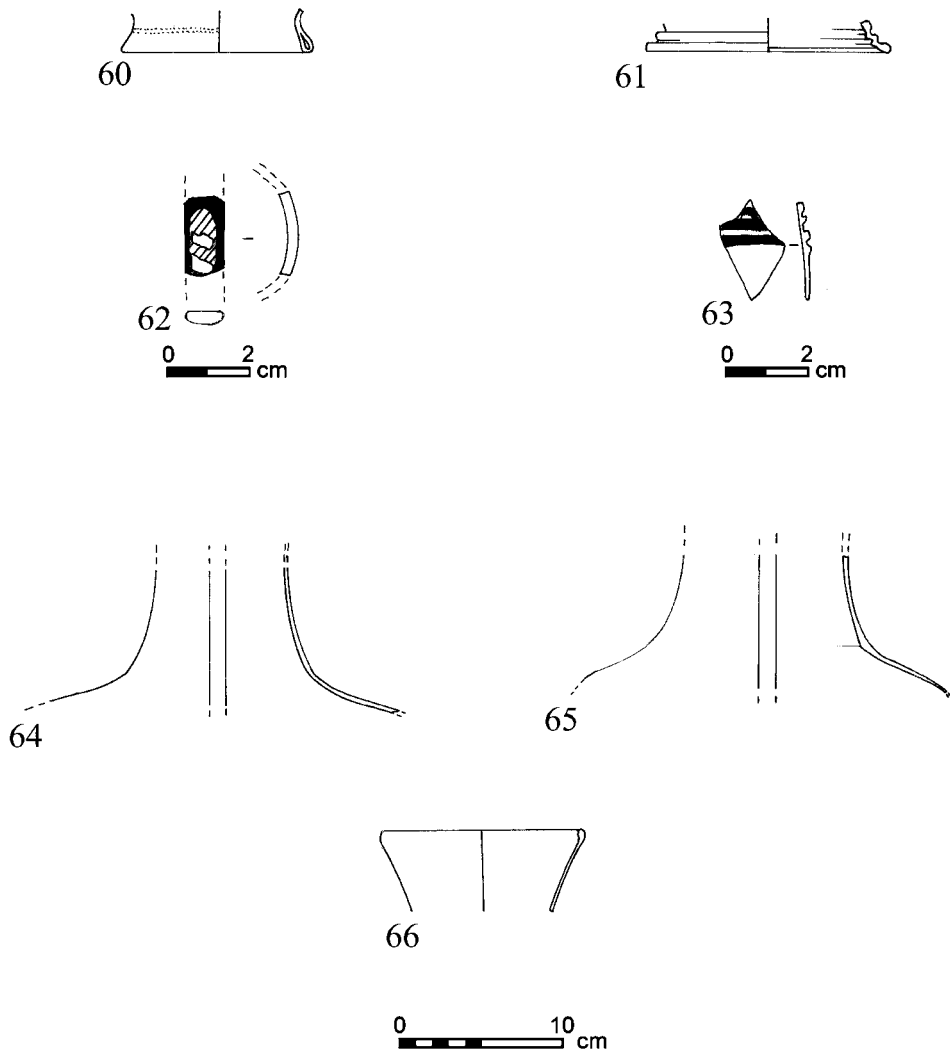


Figure 16.39. Glass

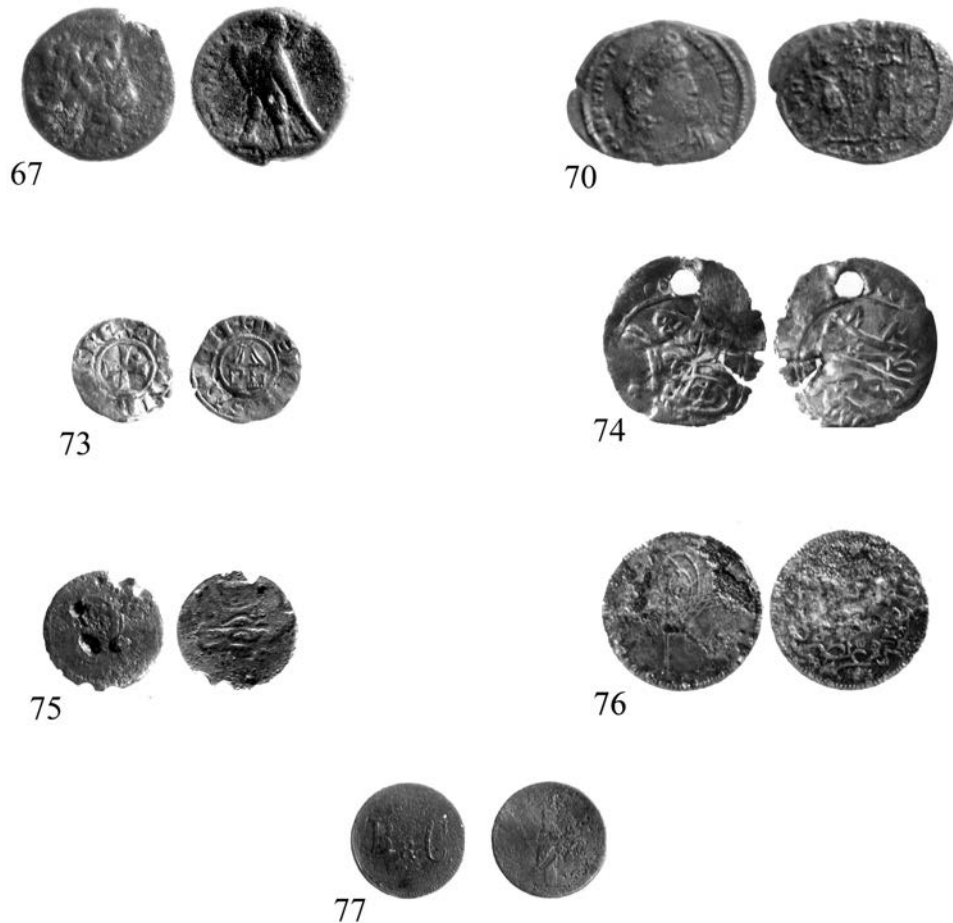


Figure 16.40. Coins

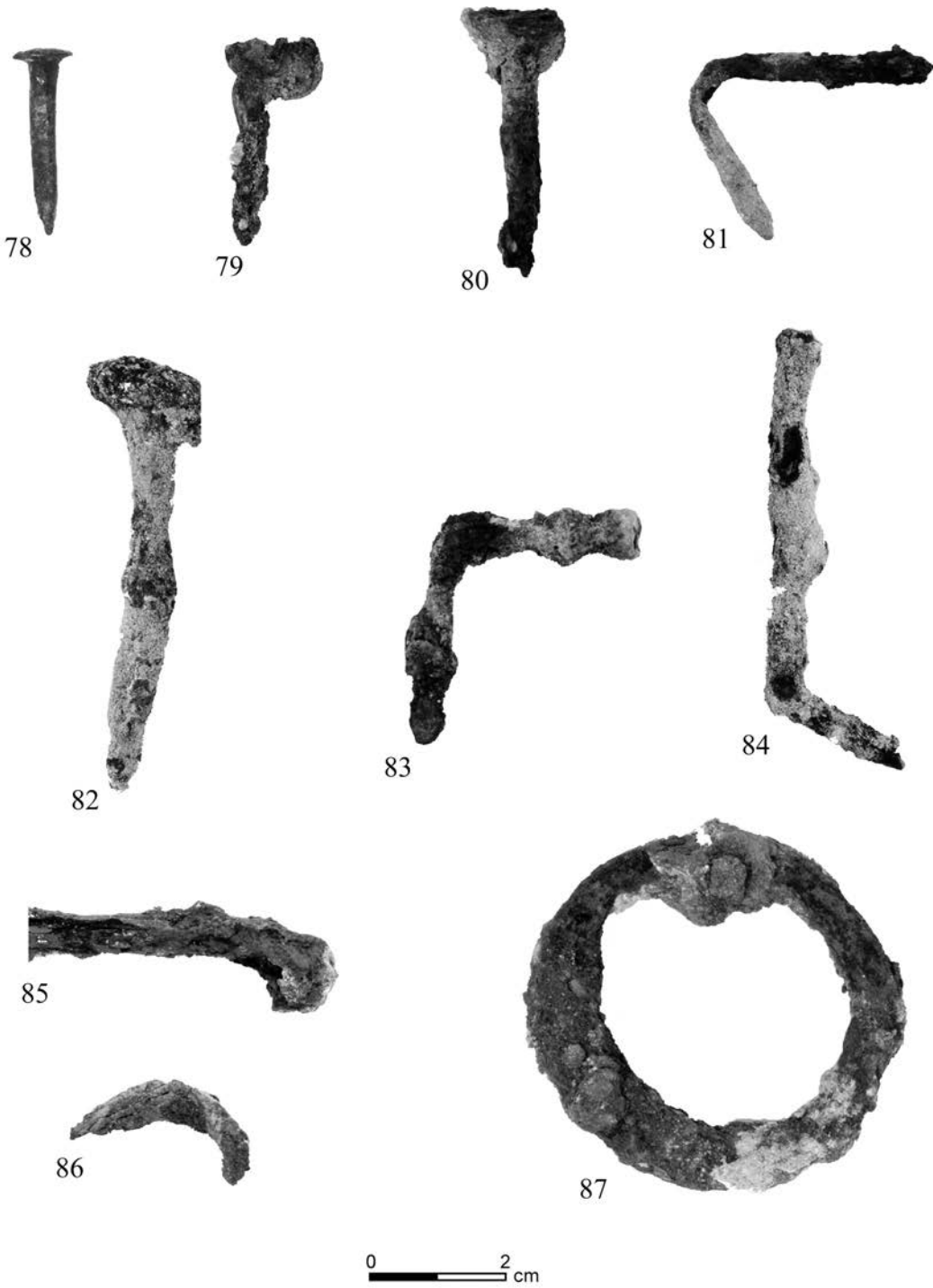


Figure 16.41. Nails and other constructional elements. Photos by Anat Litan

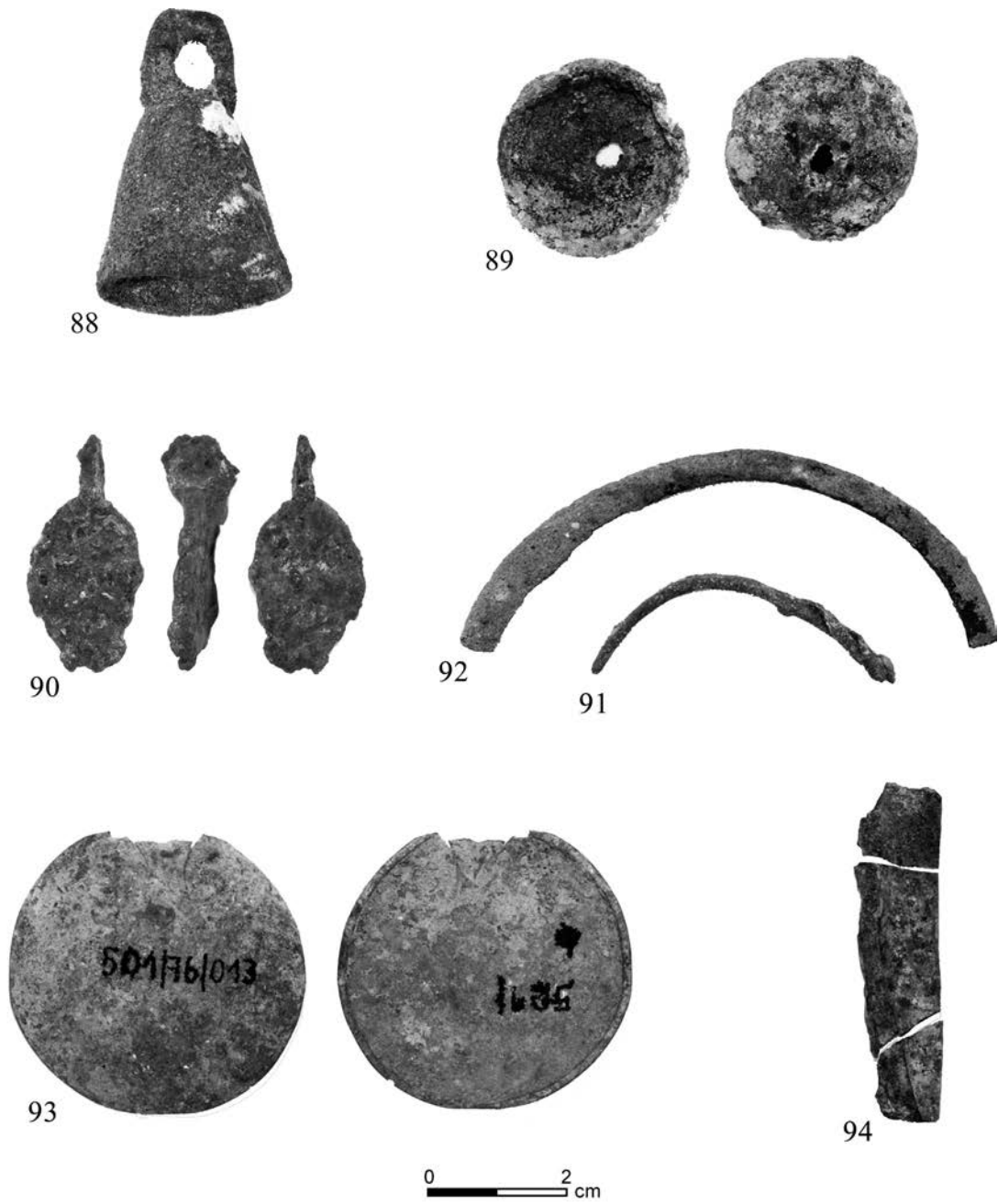


Figure 16.42. Jewelry and metal varia.

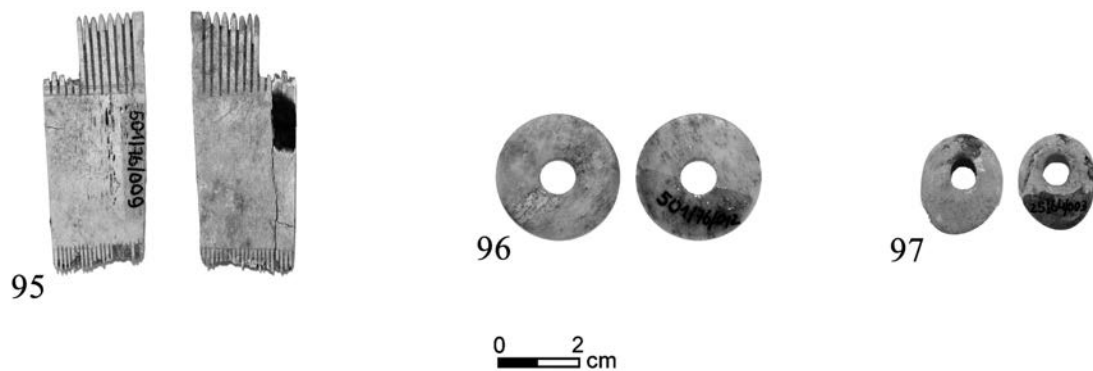


Figure 16.43. Miscellaneous. Photos by Anat Litan.

Summary and Discussion

The hill of Abu Kabir contains a dense necropolis of small burial caves cut into the *kurkar* (calceranite). Kaplan had excavated 30 caves in an area of about 10,000 m² (1 ha), limited on the west by Herzl St., on the north by Kibbutz Galuyot St., on the east by Lavon St., and on the south by the grounds of the Russian Church. This area has many more caves, some excavated by IAA archaeologists and some already opened at the beginning of the century (such as the tomb of Tabitha in the Russian Church compound). According to Kaplan, this area is only one tenth of the entire necropolis estimated at 100,000 m² (10 ha) (Kaplan 1974d:138). The cave complexes are composed of three elements: a sunken vestibule, burial chambers, and *loculi* and *arcosolia*.

The vestibules, about 1.8 x 1.8 m, are sunk about 1–1.8 m into the bedrock, a flight of stairs leads into them and they are flanked by entrances about 70 cm high and 60 cm wide that open into the chambers.

The burial chambers are no larger than 2 x 2 m or taller than 1.8 m, some significantly smaller (e.g., 1976/B). All caves have between 1–3 burial chambers. If there is only one chamber it is located opposite the stairs (Cave 1966). Most chamber entrances are simply hewn arched or square openings, in several cases the opening of a side chamber is sunk into the rock preceded by a wide arched or square niche (e.g., south entrance 1951/3 or north entrance 1976/A). This is done in order fit an entrance at the side of a staircase that leads into the vestibule, so as to distance the opening from the stairs. Three caves (1972/4, 1972 Tnuva Building cave, 1976/2a) have built-in posts and lintels at one of their entrances. The original doors that fit into these were not found, but rather the entrances were found blocked with stones, hinting not only at the removal of the doors already in antiquity but also at continued burial in the caves despite this. The doors were probably made of stone, as in other cemeteries. Recently, in excavations at the Jaffa Flea Market, a stone door of fitting proportions with a *menorah* incised on it was found in secondary use in a crusader building located about 1.4 km away from the westernmost cave in the cemetery (Arbel and Peilstöcker 2009:37).

All chambers contain *loculi*, either square or vaulted, about 60–70 cm wide, 1.8–1.9 m long, and 70–90 cm high set into the walls above floor level, mostly over a narrow ledge. Only two chambers have *arcosolia* (1972/3, 1976E) in addition to the *loculi*, which are single-troughed and cut horizontally along the wall. Some caves have large *loculi* that open directly into the vestibule (e.g., 1972/3, 1976/D). Most *loculi* were found open, but some (1952/3, Loculus 7) were found blocked with stone slabs.

The nails found in and around several caves may indicate the use of wooden coffins within the *loculi*, but no evidence of stone ossuaries or clay sarcophagi was found. In 1873 Clermont-Ganneau saw a sarcophagus used as a trough “in an Arab Sebil [*sabīl*] on the edge of the road to Jerusalem on the right just before you get to Jaffa” (*ARP II*:157–158). Kaplan later found this sarcophagus buried in the ground “in the vicinity of Abu Kabir” (Kaplan 1959:98) and connected it with the cemetery (Figures 44 and 45).¹³⁴

It seems that some of the caves had bone repositories, such as the pit hewn in the entrance to Loculus 4 in Tomb 1976/2a or the small troughs in the *arcosolia* of Tomb 1976 E.

The burial goods including bells, bracelets, amulet, bone disk, stone pendant, and bone comb all have parallels in Roman/Byzantine sepulchral contexts in the region; moreover, most of them have parallels in 4th–7th cents. CE burials.

All inscriptions described in this report were already published and discussed in detail by Price (2003). It is now possible to pinpoint the exact findspots for each of the inscriptions: all were found in the vestibules of the caves. They were most likely attached to the rock at the entrances to the chambers or over the *loculi* that opened directly into the vestibule. None of the inscriptions were found within the burial chambers. This bears much significance for the study of the deceased themselves, the ownership of the caves, and perhaps the meaning of terms occurring in the inscriptions. Such analysis should be done in comparison with the rest of the inscriptions found in this cemetery and goes beyond the scope of this report. Price had dated the inscriptions on palaeographic grounds roughly between the 3rd and 5th century CE, but this dating has been reconsidered and should probably be revised to a later dating.¹³⁵

¹³⁴ The sarcophagus seen by Clermont-Ganneau and later found by Kaplan did not come from Abu Kabir but from a different cemetery (personal communication, Tzvika Shacham, 2012).

¹³⁵ Jonathan Price, Hannah Cotton and Anna Veronese, personal communication, 2012.

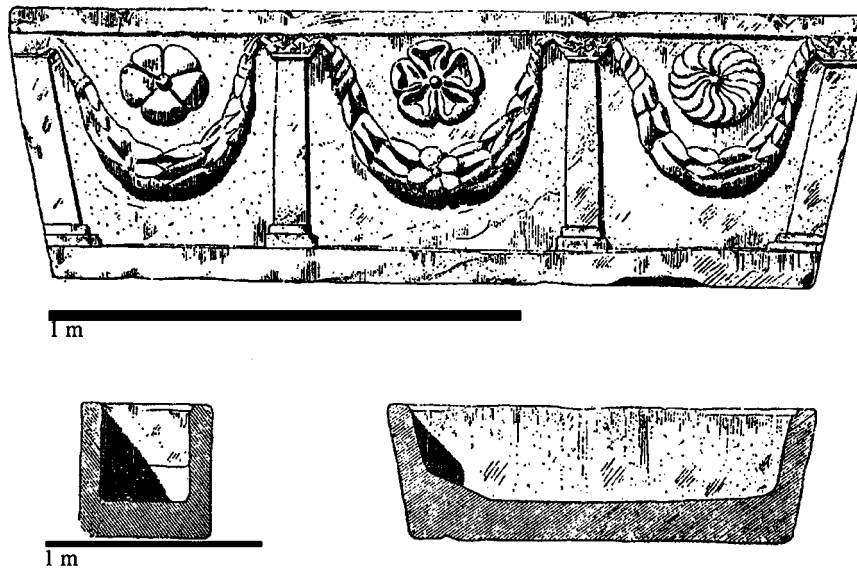


Figure 16.44. Sarcophagus as drawn in ARP II:157.

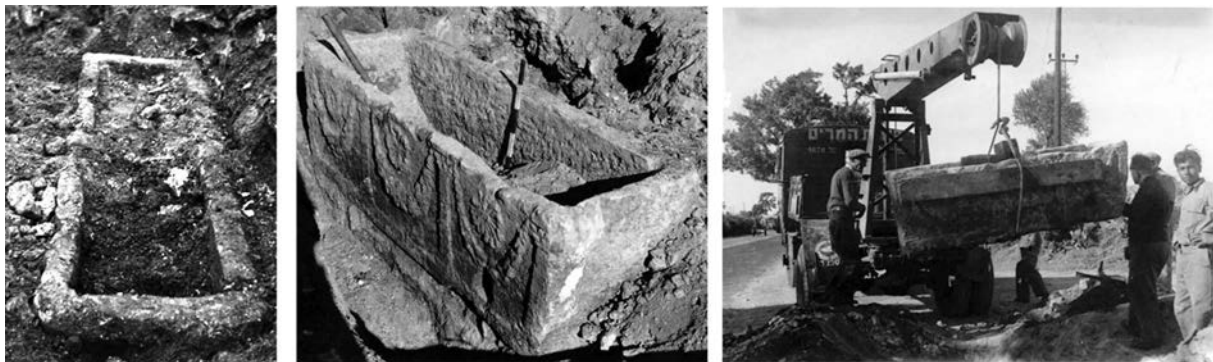


Figure 16.45. From left to right, the discovery, cleaning, and removal of the sarcophagus by Kaplan. Kaplan Archive.

The meager ceramic evidence from the site shows two distinct periods of activity: 1) from the 4th until the late 6th century CE, and 2) during the Ottoman period, probably only the 19th to 20th century CE, specifically between 1831–1948 when the hill was settled. The former date represents the period during which the cemetery was active.

Numismatic finds are also not abundant: eleven coins were found in Kaplan's excavations. Once the four Ottoman coins, single Crusader coin, a Ptolemaic coin found on the surface and an unidentified coin are disregarded. Thus, four coins ranging between the 1st to 5th centuries CE were left. A coin of Agrippa I, dating 41/42 CE, was found on the floor of Tomb 1972/4, the tomb was open and its ceiling breached. The other three coins range between the 4th to 5th centuries: a) a coin of Constantine I found inside the sealed 1972/3 tomb; b) a blank nummus found in the vestibule of the 1972 Tnuva Building cave; and c) a coin which was possibly minted under Arcadius was found on the floor of a possibly sealed chamber in the tomb excavated in 1966. Thus, two, possibly three, of the coins found inside burial chambers date between the 4th and 5th centuries CE, supporting the date of the ceramics. The single coin of Agrippa I is simply not enough evidence to predate the cemetery.

Kaplan's excavations produced seven indicative glass fragments that R. Jackson-Tal has identified. Apart from an Ottoman bracelet, two are dated to the 3rd to 4th centuries CE, two to the 4th to 5th centuries CE, and two to the 3rd to 5th centuries CE. All dates converge around the 4th century CE and fit well within the dates of the other finds.

Thus, considering all the data presented above, the Abu Kabir cemetery was active starting early in the 4th century, maybe a bit earlier, up until the 2nd half of the 6th century CE. The site then sat mainly undisturbed until the 19th century.

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